



South Tyneside and Sunderland NHS Foundation Trust

Green Plan 2022 - 2025



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Foreword

It is the Trust's vision to be an outstanding provider of healthcare, research and education, and a great place to work. We can only achieve this through balancing the three pillars of sustainability (financial, social and environmental).

Consequently, the Trust has produced this Green Plan to create a clear and unambiguous plan to deliver a range of core sustainability-related objectives.

In doing so, STSFT recognises the importance of the NHS Sustainable Development Unit's work and their Sustainable Development Assessment Tool (SDAT) has been used as a framework to assist in the development of this Green Plan.

We will continue to play a significant role in both Sunderland and South Tyneside economies in driving down carbon emissions as we march towards the target of zero carbon by 2040.

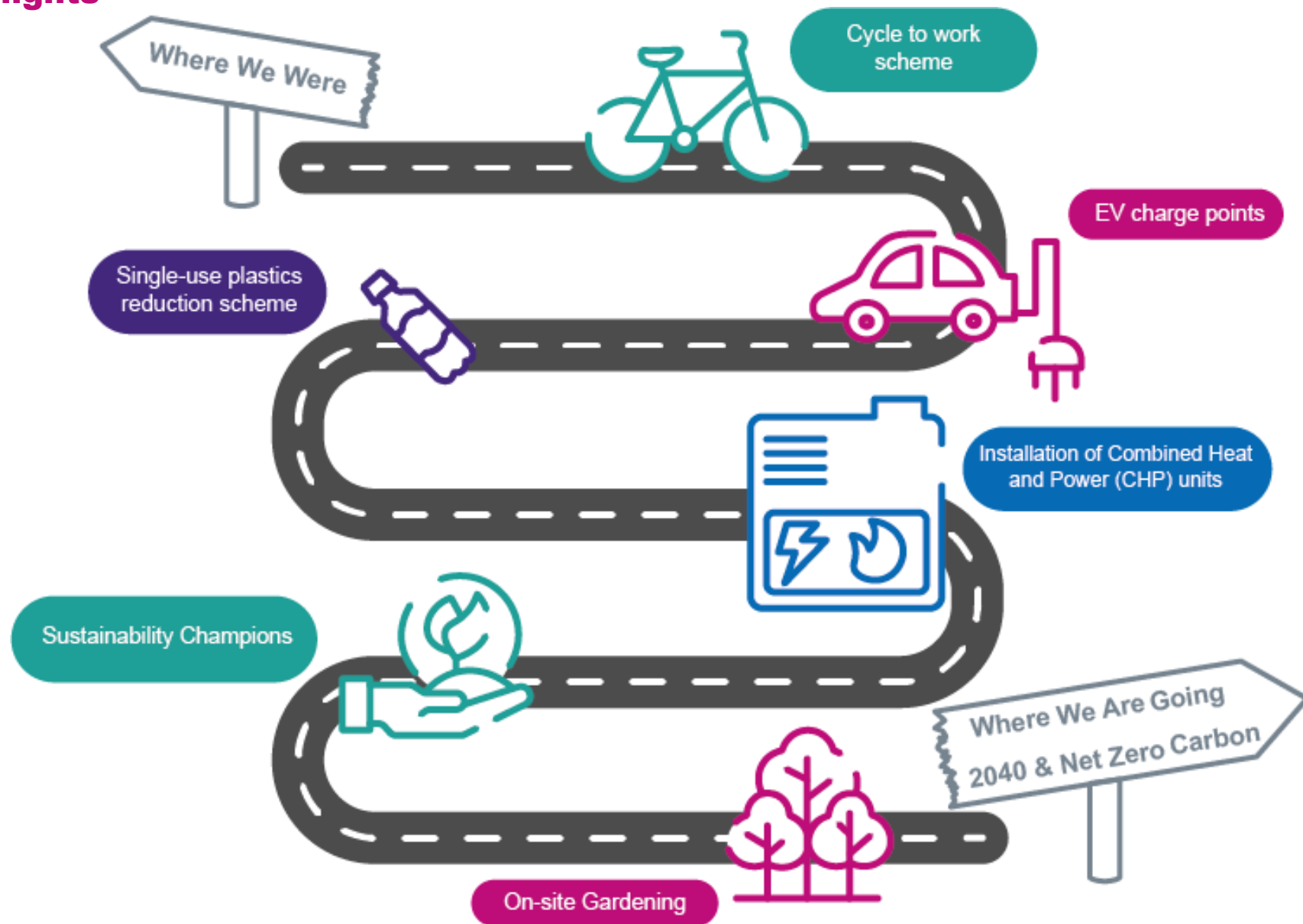
The Trust already incorporates sustainability in many aspects of its activities; however, we always recognise that more can be done. The huge challenge presented by covid 19 is also an opportunity for us to rethink the way we deliver care.

Realising the potential for sustainable development will contribute to the Trust meeting the objectives of its Clinical Strategy. In addition, the financial benefits accruing from increasingly sustainable activities will allow the Trust to invest further in its clinical services.

We are confident that we can work with our partners in the local health and care system to achieve a more sustainable way of working, and I am pleased to endorse the findings and proposals set out in this document

-Mr Ken B Bremner, CEO

Highlights



Introduction

“While the NHS is already a world leader in sustainability, as the biggest employer in this country and comprising nearly a tenth of the UK economy, we’re both part of the problem and part of the solution.

That’s why we are mobilising our 1.3 million staff to take action for a greener NHS, and it’s why we have worked with the world’s leading experts to help set a practical, evidence-based and ambitious route map and date for the NHS to reach net zero.”

Sir Simon Stevens, former NHS Chief Executive

South Tyneside and Sunderland NHS Foundation Trust (STSFT) is proud to share our Green Plan, which seeks to embed sustainability and low carbon practice in the way we offer vital healthcare services and help the NHS to become the first health service in the world with net zero greenhouse gas (GHG) emissions. Our Trust was formed on the 1st of April 2019 after a merger between City Hospitals Sunderland NHS Foundation Trust and South Tyneside NHS Foundation Trust.

The climate crisis is also a health crisis. Rising temperatures and extreme weather will disrupt care and impact the health of our patients and the public, especially the most vulnerable in our society.

People with mental health issues may experience a higher degree of ‘climate anxiety’, and there may be co-morbidities associated with the physical impacts of climate change and a deterioration in mental health. STSFT has a central role to play in reducing health inequalities and helping the NHS to reach net zero.

This Green Plan serves as the central document for STSFT’s sustainability agenda and provides the rationale for sustainability at the Trust. Through this Green Plan, STSFT will work with our staff, patients and partners to take powerful sustainable development and climate action as part of our commitment to offer the highest quality care to our communities.

Performance towards Green Plan actions will be monitored by the Trust’s Sustainable Healthcare Group, with progress monitored by the Health and Safety Group and Corporate Governance Steering Group. Performance will also be reported through our Sustainability Group.

South Tyneside & Sunderland NHS Trust in 2020/2021

Number of
employees (FTE):
8,439

Footprint of Sites:
155,997m²

Key Services:
Acute and community
services

Geography:
STSFT provides acute and community
healthcare services to people in the South
Tyneside, City of Sunderland and Durham
We provide community and other services to
people in Gateshead and specialist services
accessed by patients across the North East

Patient Numbers:
67,682 inpatients
392,182 outpatients

Specialised Services:
Audiology, bariatric surgery, cardiology,
ear, nose and throat, head and neck
cancer, neonatal, neurology,
ophthalmology, oral surgery, orthodontics,
renal medicine, spinal service, urology,
vascular

Number of Sites:
12



Trust Key Resources and Baseline Data



**Building
Energy**
130 GWh

**Baseline year
for Plan**
2020/2021



**Waste
Arisings**
1229 tonnes



**Procurement
Activity**
£61,723,142



**Water
Supplied**
376,396m³

**Business
Travel**
including staff
commuting
22,973,321 km



**Patient/Visitor/
Communiting
Travel**
5,985,604 km



Organisational Vision

Vision

“To deliver nationally recognised, high quality, cost effective, sustainable healthcare for the people we serve, with staff who are proud to recommend our services.”

To support our Vision, we embrace five core values, which reflect the way we do things at STSFT:

Compassionate and dignified, high quality, safe patient care always the first priority

Working together for the benefit of our patients and their families or carers

Openness and honesty in everything we do

Respect and encouragement for our staff

Continuous improvement through research and innovation



Figure 1 STSFT 2021/22 Strategic Objectives

Our Green Plan adds further environmental and social dimensions to the delivery of care, especially in terms of the widely accepted climate and ecological crisis.

Our Green Plan Vision

Net Zero: resource consumption and Greenhouse Gas (GHG) emission reductions that align with NHS net zero targets and mitigate against climate change.

Climate Resilience: adaptation strategies that strengthen our ability to maintain quality care and provide a basis for us to become a climate change resilient organisation.

Social Value: actions that influence the collective social wellbeing of our patients, staff and surrounding community.

Our Green Plan has nine Areas of Focus that appraise our status and set actions to be achieved within the next three years:

1. Workforce and Systems Leadership
2. Sustainable Models of Care
3. Digital Transformation
4. Travel and Transport
5. Estates and Facilities
6. Medicines
7. Supply Chain and Procurement
8. Food and Nutrition
9. Adaptation



Durham Treatment Centre. Source: STSFT Library

Our Drivers for Change

STSFT is committed to deliver the NHS Long Term Plan, Standard Contract, and the recommendations in the Priorities and Operational Planning Guidance and '*Delivering a Net Zero NHS*'-report, all of which have informed our Green Plan and shape our Vision.

We will work through this plan to fulfil sustainable development requirements from the NHS (as shown in Figure 2) and other relevant legislation (as listed on the next page in Figure 3) that are aligned with the relevant United Nations (UN) Sustainable Development Goals (SDGs). This includes obligations to minimise adverse impacts on the environment and secure wider social, economic and environmental benefits for our communities.

We also commit to review and participate in regional partnerships and strategies related to sustainable development wherever appropriate.



South Tyneside Hospital. Source: STSFT Library

Priority	Link to our Green Plan
NHS NHS Long Term Plan (LTP)	2.18 Take action on healthy NHS premises. 2.21 Reduce air pollution from all sources. 2.24 Take a systematic approach to reduce health inequalities. 2.3 Improve preventative care. 2.37 Commission, partner with and champion local charities, social enterprises and community interest companies. 4.38 Make the NHS a consistently great place to work – promoting flexibility, wellbeing and career development. 4.42 Place respect, equality and diversity at the heart of workforce plans. 16 Play a wider role in influencing the shape of local communities. 17 Lead by example in sustainable development and in reducing use of natural resources and the carbon footprint of health and social care 18 Create social value in local communities as an anchor institution.
NHS Standard Contract 21/22 SC18	18.1 Take all reasonable steps to minimise adverse impact on the environment. 18.2 Maintain and deliver a Green Plan, approved by the Governing Body, in accordance with Green Plan Guidance.
NHS Planning Guidance 21/22 PG	C1 Where outpatient attendances are clinically necessary, at least 25% should be delivered remotely by telephone or video consultation
NHS Estates 'Net Zero' Carbon Delivery Plan NZCDP	1. Making every kWh count: Investing in no-regrets energy saving measures 2. Preparing buildings for electricity-led heating: Upgrading building fabric 3. Switching to non-fossil fuel heating: Investing in innovative new energy sources 4. Increasing on-site renewables: Investing in on-site generation
NHS Greener NHS / Net Zero Plan	Net zero by 2040 for the NHS Carbon Footprint, with 80% reduction by 2028 to 2032. Net zero by 2045 for the NHS Carbon Footprint 'Plus', with an ambition for an 80% reduction by 2036 to 2039.

Figure 2 NHS Environmental Drivers

Legislative Drivers	UK guidance
Civil Contingencies Act 2004	National Policy and Planning Framework 2012
Climate Change Act 2008 (as amended)	Department of Environment, Food and Rural Affairs (DEFRA) The Economics of Climate Resilience 2013
Public Services (Social Values) Act 2012	Department for Environment, Food and Rural Affairs (DEFRA) Government Buying Standards for Sustainable Procurement 2016
Mandatory; those mandated within the NHS	The Stern Review 2006; the Economics of Climate Change
Standard Form Contract requirements	Health Protection Agency (HPA) Health Effects of Climate Change 2012
HM Treasury's Sustainability Reporting Framework	The National Adaptation Programme 2013; Making the country resilient to the changing climate
Public Health Outcomes Framework	Department of Environment, Food and Rural Affairs (DEFRA) 25 Year Plan
International	Health Specific Requirements
Intergovernmental Panel on Climate Change (IPCC) AR5 2013	Delivering a Net Zero National Health Service 2020 and Greener NHS guidance
UN Sustainable Development Goals (SDGs) 2016	Five Year Forward View 2014
World Health Organisation (WHO) toward environmentally sustainable health systems 2016	Sustainable Development Strategy for the Health and Social Care System 2014-2020
World Health Organisation (WHO) Health 2020	Adaptation Report for the Healthcare System 2015
The Global Climate and Health Alliance. Mitigation and Co-benefits of Climate Change	The Carter Review 2016
	National Institute for Clinical Excellence (NICE) Physical Activity; walking and cycling 2012
	Health Technical Memoranda (HTM)'s and Health Building Notes (HBN)'s
	Sustainable Transformation Partnerships (STP) Plans

Figure 3 Legislative Drivers with UK Guidance

The UN Sustainable Development Goals

Our Trust is working meaningfully towards the United Nations (UN) Sustainable Development Goals (SDGs) through our Green Plan, which we have aligned to relevant SDG targets.

The SDGs underpin a global action framework to 2030, adopted by every UN member country to address the biggest challenges facing humanity.

Each goal has targets and indicators to help nations and organisations prioritise and manage responses to key social, economic and environmental issues.

“The NHS belongs to all of us” *

The NHS and its people contribute to multiple SDGs through the delivery of its core functions, for example, target 3.8, to achieve universal health coverage.

Established on 5th July 1948, the UK’s National Health Service is the world’s first modern fully universal healthcare system, free at the point of use, and celebrating its 75th year in 2023.

* Constitution of NHS England

STSFT will work to ensure:

Meaningful alignment to SDG targets within each Green Plan area of focus

The establishment of effective partnerships for the goals within our region and beyond

Awareness of and links to the SDG’s global context, wherever appropriate



Linking our Green Plan to NHS Net Zero

Contributing around 4% of the country's carbon emissions, and over 7% of the economy, the NHS has an essential role to play in meeting the net zero targets set under the Climate Change Act.

Two clear and feasible net zero targets for NHS England are outlined in the ['Delivering a 'Net Zero' National Health Service'](#)-report (aka NHS Net Zero Report):

- **The NHS Carbon Footprint** for the emissions we *control* directly, net zero by **2040**
- **The NHS Carbon Footprint 'Plus'** for the emissions we can *influence*, net zero by **2045**.

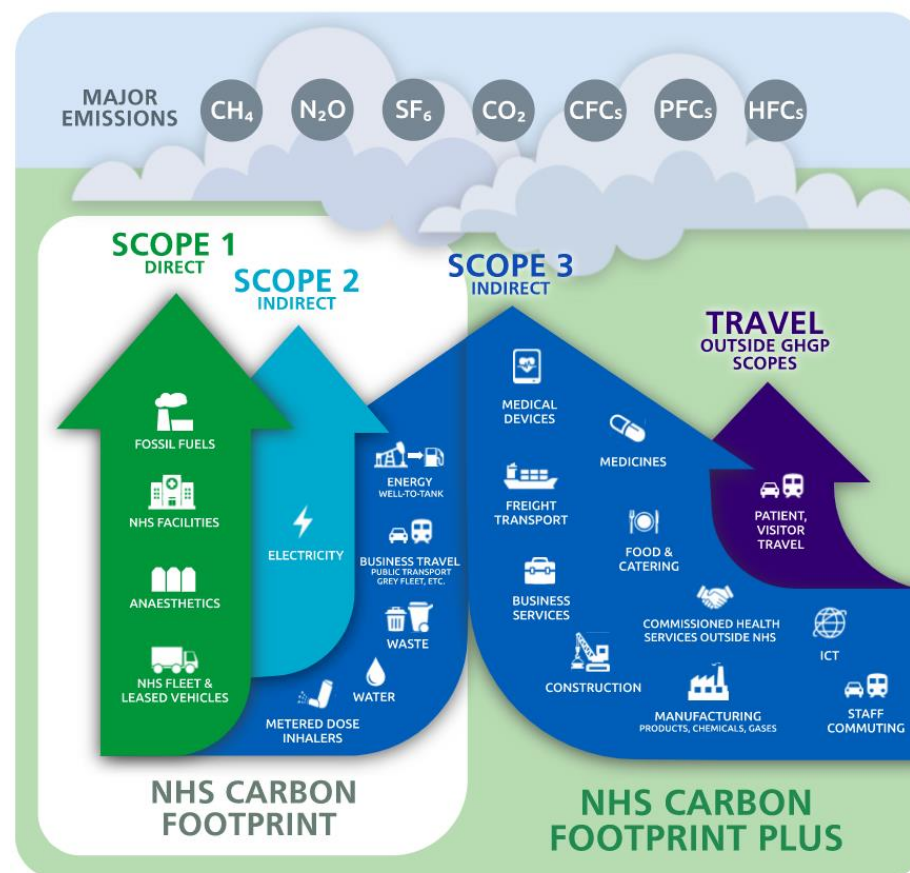
All NHS trusts are to align their Green Plans with NHS England's net zero ambitions. We have calculated those emissions from all the sources listed in the NHS Net Zero Report to be reduced by approximately 4% year-on-year (akin to Science Based Targets) until each of the target dates, respectively.

Greenhouse Gas Emissions

Greenhouse gas emissions are conventionally classified into one of three 'scopes', dependent of what the emission source is and the level of control an organisation has over the emission source. They are reported in 'tonnes of carbon dioxide equivalent' (t CO_{2e}).

The emission sources and their 'scope' are shown in the infographic (Figure 4).

Figure 4 Greenhouse gas emission sources, and their 'scopes'



Data and methodology

The result of a GHG emission calculation varies in accuracy depending on the data set provided. The more accurate the data supplied, the more accurate the result, which will subsequently allow for better targeting of areas where improvements can be made.

STSFT's GHG emissions footprint has been calculated according to the GHG Protocol for Corporate Reporting and aligned with ISO 14064:1.

We have calculated our Trust's carbon footprint from 2018/19 to 2020/21 in terms of building energy and delivery of care, travel, and our supply chain, as per the categorisations in the NHS Net Zero-report. Data for 2021/22 was projected based on these calculations.

We have used the following primary data:

- resource consumption (electricity, gas, water) data from utility bills
- waste arisings from data sets from waste contractors
- number of inhalers from our prescribing data
- volatile anaesthetics amounts from our consumption data
- fleet vehicle fuel use from fuel reports/receipts
- published procurement spend

We have used the NHS' Health Outcomes of Travel Tool (HOTT) to estimate emissions from staff commuting, patient and visitor travel and our published procurement expenditure to derive spend-based emission values for categories within our supply chain.

We are using 2020/21 as our baseline year to set targets against as calculations were made before the 2021/22 financial year was complete.

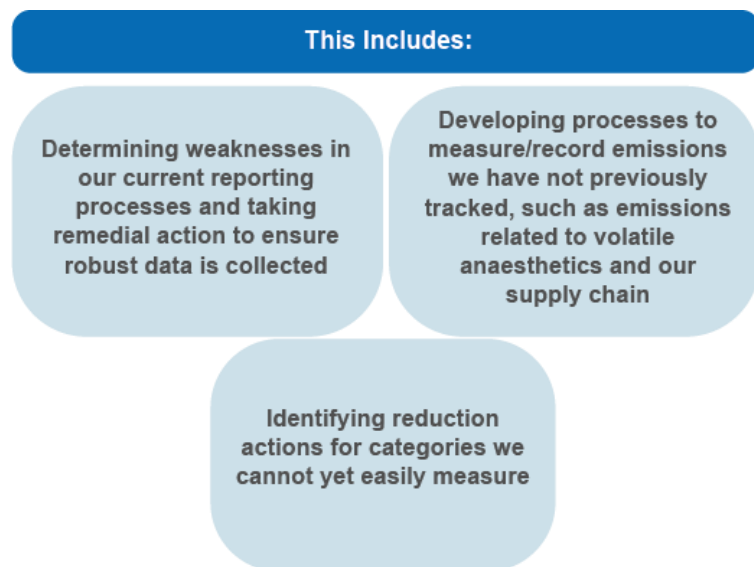


Staff and Patients. Source: STSFT Library

STSFT's Net Zero ambitions

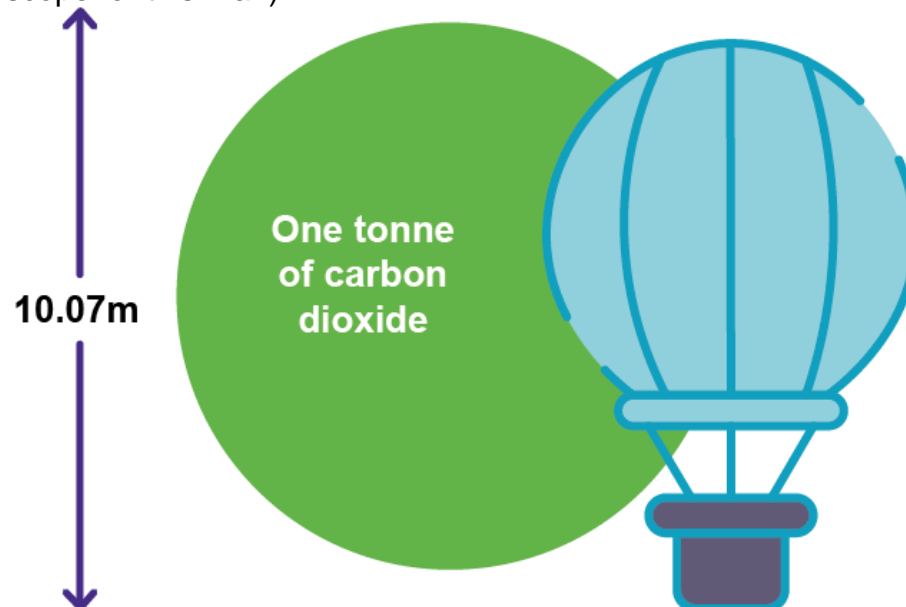
STSFT fully commits to reducing our greenhouse gas emissions to Net Zero to prevent the worst impacts of climate change and meet NHS Net Zero commitments. This plan outlines high-level emissions reductions and enabling actions for each area of focus. This means STSFT needs to act now to reduce our emissions from a variety of direct and indirect sources; from our estate to the care that we deliver and beyond, each year from now until we achieve Net Zero.

We are using this Green Plan to improve our Net Zero-related data collation, carbon footprint and reporting capacity over time.



An emissions-reduction trajectory for each emission source has been given in each Area of Focus (if applicable) for the next three years until 31st March 2025. To achieve these emission reductions, we have listed a series of actions in each Area of Focus. There will be residual emissions at both the 2040 and 2045 target dates,

and these will need to be 'offset' or sequestered (which is not in scope for this Plan).



What does 1 tonne of carbon dioxide look like?

One tCO₂e can be visualised as a volume of gas the size of a hot air balloon – a sphere about 10 metres in diameter.

The average 3-bedroom semi-detached home in North East England emits around 1 tCO₂e per year from electricity consumption and almost 2 tCO₂e from the use of natural gas for heating and cooking.

Our Current Position

Our Carbon Footprint in 2020/21 was **82,964 tCO₂e**.

To meet the NHS Net Zero commitments, we need to reduce our emissions by an additional **2,595 tCO₂e** each year until 2040/45.

Akin to the NHS Net Zero report, most of our emissions (76.6%) came from sources we have little or no control over: 61.8% from our supply chain, and a further 14.1% from patient and visitor travel.

The remaining 23.4% arise from sources we can control or strongly influence: 22.4% of our emissions came from the operation of our buildings and 0.2% from transport associated with the delivery of care (including staff commuting). No emissions were attributed to inhalers or volatile anaesthetics, as the data was unavailable.

See Figure 5 for the split of each emission category, as per the NHS Net Zero report categorisation. Data shown relate to emissions in tCO₂e and their relative proportion of our footprint.

Key:

Delivery of Care:



Personal Travel:



Supply Chain:



Commissioned Services:

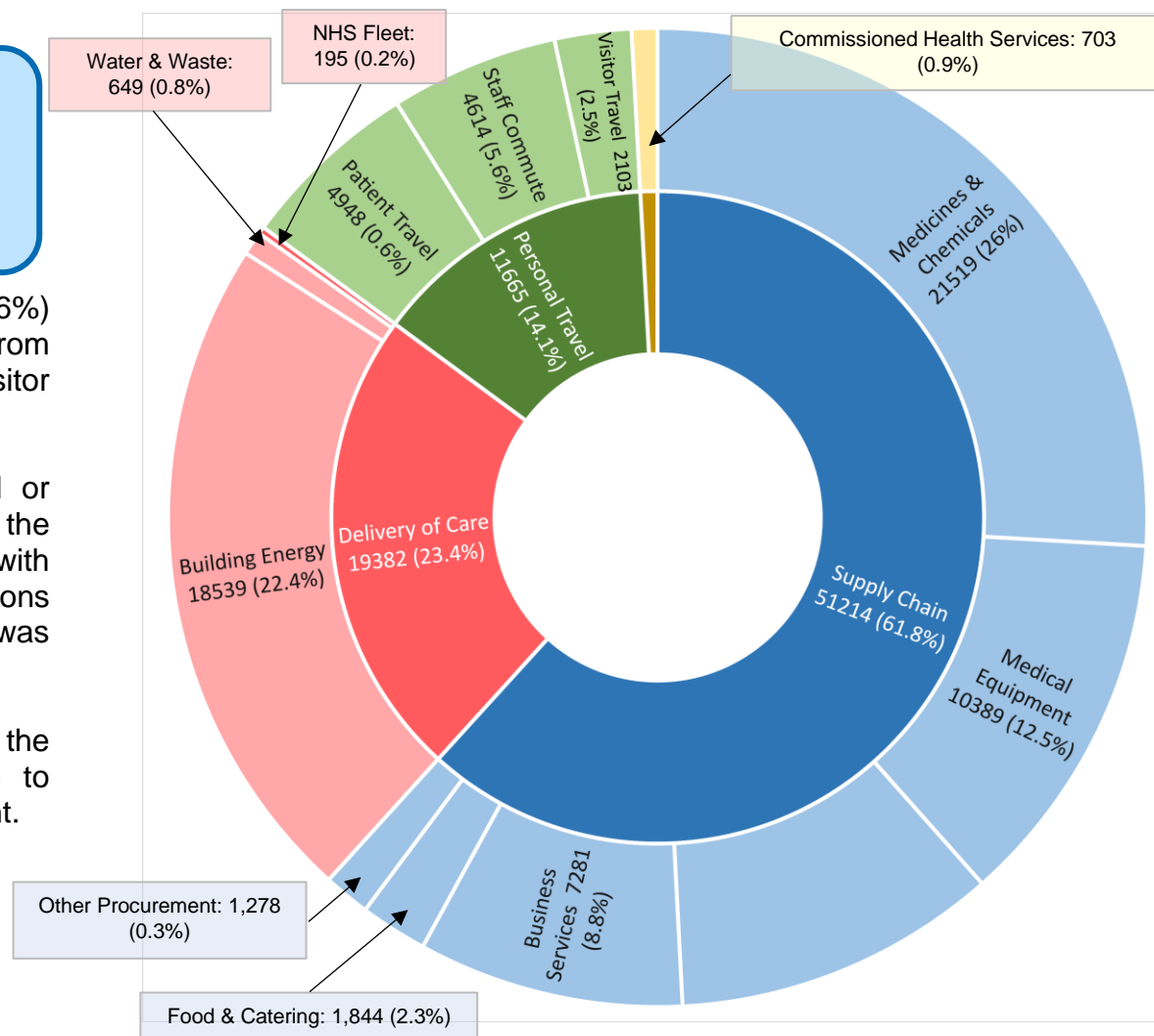
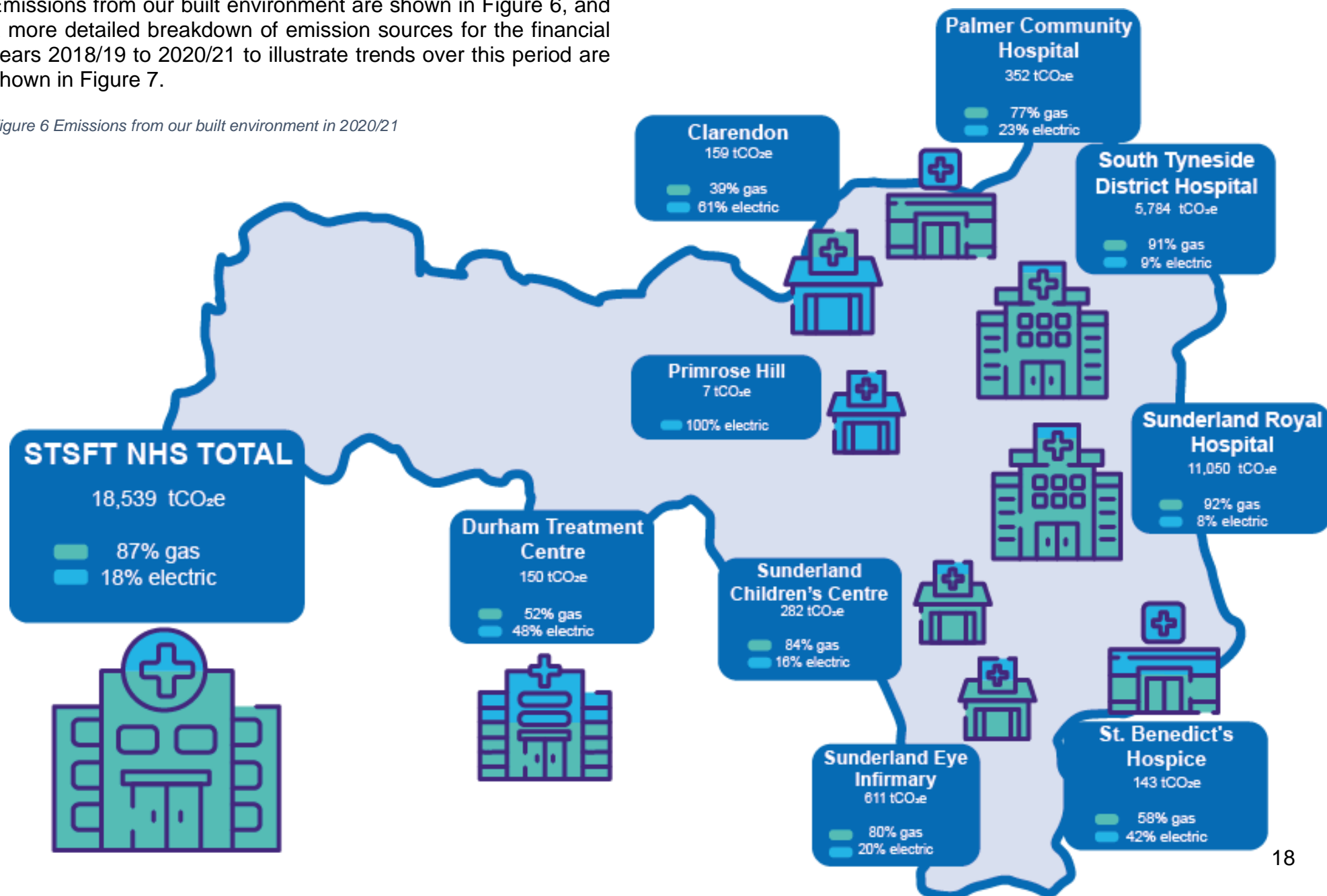


Figure 5 STSFT total carbon footprint breakdown in 2020/21

Emissions from our built environment are shown in Figure 6, and a more detailed breakdown of emission sources for the financial years 2018/19 to 2020/21 to illustrate trends over this period are shown in Figure 7.

Figure 6 Emissions from our built environment in 2020/21



Our Emissions-reduction trajectory

We have grouped emission sources together and calculated yearly emission reduction targets to 2024/25 (Figure 7).

The reduction trajectory excludes inhaler and volatile anaesthetic data due to an unavailability of data. To address this in the future, we will improve upon our internal communication to collate the necessary data.

Emissions rose in 2020/21 compared to 2019/20. This is due to our response to the COVID-19 pandemic, entailing a higher procurement spend and additional waste arisings.

We need to reduce our total emissions by 10,379 tCO₂e from our 2020/21 baseline (taking into consideration the recent procurement of renewable electricity), by 2024/25. This roughly equates to **2,600 tCO₂e** per annum.

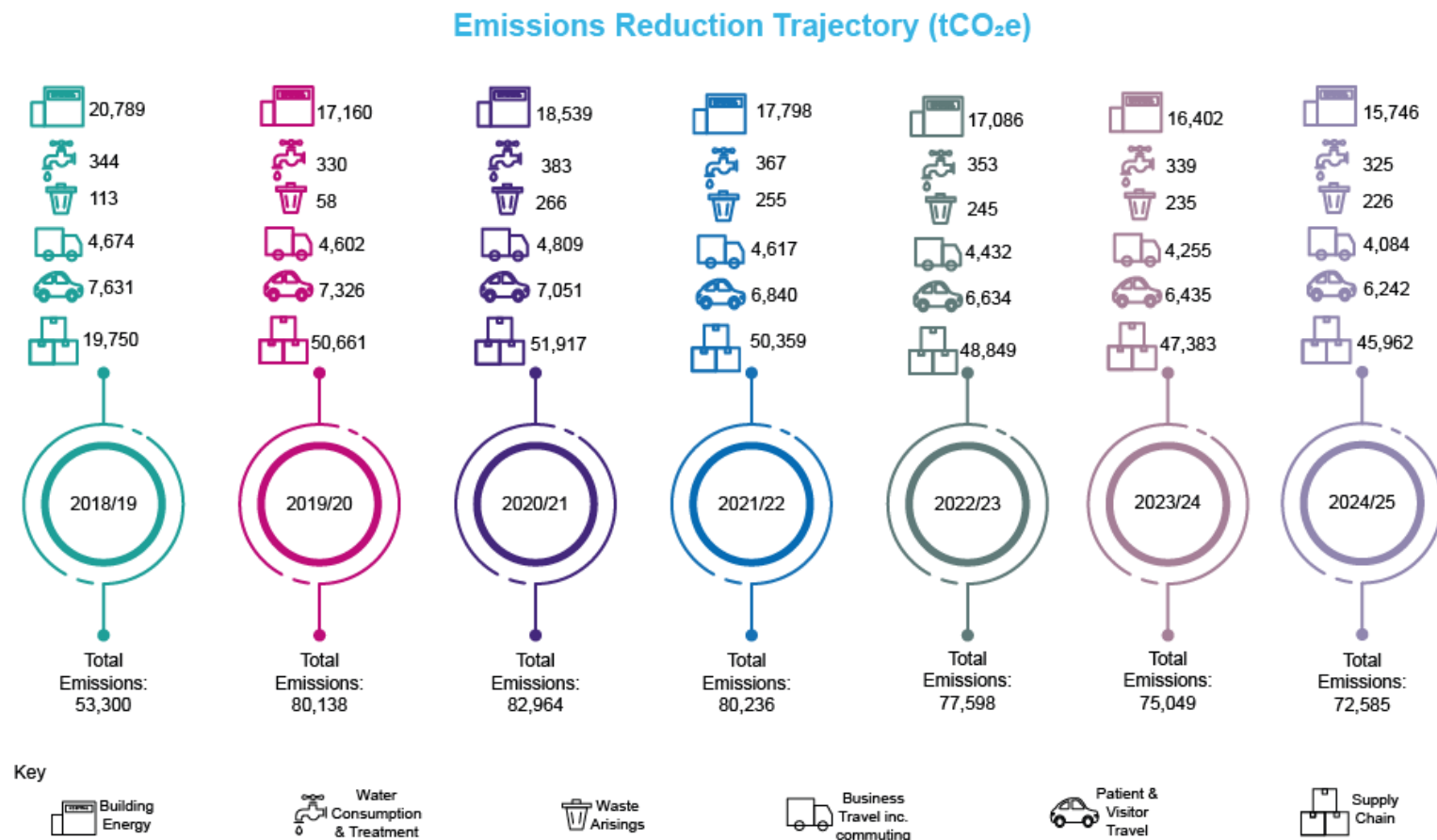


Figure 7 STSFT Estimated GHG Reduction Target for three years by activity to meet 'Delivering a Net Zero NHS'

Areas of Focus Contents

The following 'Areas of Focus' give an overview of our current performance/status and an Action Plan.

The Action Plans state individual actions to achieve our Green Plan goals over the next three years. Individual actions are to be monitored and evaluated routinely, and progress status changed accordingly.

We have given indicative costs and emission reductions. These are very high-level assumptions. A key is given below.

Key:

Indicative Cost to achieve:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative Emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

Not applicable

Workforce and
System Leadership 21

Sustainable Models
of Care 26

Digital
Transformation 28

Travel and
Transport 31

Estates and
Facilities 40

Medicines 56

Supply Chain and
Procurement 61

Food and Nutrition 69

Climate Adaptation 72

Workforce and System Leadership

We will build our Green Plan into our strategic planning and governance, including our clinical and operational policies and procedures to ensure sustainable development is a part of our daily work and how we measure success.

This is a shared journey, and we ask our colleagues to be a part of it.

We have a board-level Net Zero lead, who will oversee the resourcing and delivery of this Green Plan. Action plans identified by this Green Plan will be reviewed in discussion with Finance and Capital Planning personnel to identify suitable budgets. We will also seek internal and third-party funding to support the roll-out of Green Plan actions.

This Green Plan is approved by our Board of Directors and will be reviewed (and revised if necessary) at least annually to keep us on track with the NHS net zero and STSFT's own targets. These reviews and our progress against the actions in the Green Plan will be submitted to our Coordinating Commissioner.



COVID-19 Ward staff. Source: STSFT Library



No	STSFT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept	NHS Req.
01	Review and approve the plan at our Board level, monitoring delivery at Board meetings and relevant committees.	Governance & policy	22/23		£		Board of Directors	SC 18.2
02	Nominate and empower a Climate Change Adaptation Lead and keep the Co-ordinating Commissioner informed at all times of the persons holding these positions.	Governance & policy	22/23		£		Board of Directors	LTP 2.24,17 SC 18.2.2
03	Identify budgets for the delivery of each 'area of focus' and the Green Plan as a whole.	Governance & policy	22/23		£		Board of Directors	LTP 2.24,17
04	Streamline data collection processes and produce a comprehensive monthly data report with relevant Green Plan metrics.	Governance & policy	22/23		£		Sustainability Lead	NZ 3.1.1, 3.1.2
05	Produce an annual granular carbon account in line with HM Treasury's 'Public sector annual reports: sustainability reporting guidance', with the intention of widening its scope and data quality, when possible, along with an annual review of the progress against the Green Plan actions / emission reduction targets	Core responsibilities	22/23		£		Sustainability Lead	SC 18.3
06	Ensure staff are resourced to undertake Green Plan duties and nominate a lead person or department for each Green Plan area of focus to develop and coordinate action through the existing Sustainability Group.	Governance & policy	23/24		£		Board of Directors	LTP 2.24,17
07	Ensure the Green Plan delivery is reflected in our corporate risk register.	Governance & policy	23/24		£		Board of Directors	LTP 2.24,17
08	Review procurement plan at board level to achieve a net zero supply chain. Fulfilling our role as an anchor institution to achieve social value and wider benefits for our communities, particularly, for our care groups.	Procurement & Supply Chain	23/24		£		Board of Directors	LTP 2.24,17
09	Identify and action ways to engage patients and community in Green Plan delivery, including links between health inequality and climate action.	Working with patients, staff & communities	23/24		£		HR	LTP 2.24,17
10	Identify internal and third-party funding to enable key Green Plan actions.	Governance & policy	On-going		£		Estates/Clinical Leads	LTP 2.24,17
11	Work in partnership with neighbouring NHS trusts and public authorities to enhance the delivery of the Green Plan and share best practice	Governance & policy	On-going		£		Board of Directors	LTP 2.24,17
12	Ensure quarterly Greener NHS Data Collection uploads are made	Core responsibilities	On-going		£		Estates	NZ 3.1.1, 3.1.2

Figure 8 Green Plan actions for system leadership

Workforce

All our colleagues are needed for our Green Plan to be successful.

The NHS is the biggest employer in Europe and the world's largest employer of highly skilled professionals and the NHS Long Term Plan aims to ensure it is a rewarding and supportive place to work.

A 2018 national survey of NHS staff showed that 98% of those surveyed thought it was important that the health and care system works in a way that supports the environment, and STSFT will enable our colleagues to lead the way to achieve a greener NHS.

However, we need to embed our Green Plan within our culture and recognise that our people are the core of the NHS. Building on our experience of leading a person-centred trust, we will empower our colleagues to deliver this Green Plan at all levels of our organisation. To do this, we will further utilise the Greener NHS "One Year On" Communications Toolkit, currently used for general messaging and press releases.

The Trust has an engagement campaign encouraging staff to be more sustainable at home and promote sustainable lifestyles. We have introduced a team of sustainability champions to support sustainability awareness and action, who undergo regular training to ensure their engagement is effective and impactful.



Alcohol Care Team. Source: STSFT Library

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Incorporate the Green Plan into the Sustainability Group agenda.	Governance & policy	22/23		£	✗	People & OD	LTP 4.1, 4.3, 4.39, 4.42 SC 13.1 to 13.10
02	Building on our current practice, review our policies and processes against NHS aims for ensuring: <ul style="list-style-type: none"> rewarding, flexible and supportive work and positive action on promoting equalities, including through the Workforce Race Equality Standard and new Workforce Disability Equality Standard, and regular reporting against the NHS Model Employer Strategy. 	Governance & policy	On-going		£	✗	People & OD	LTP 4.1, 4.3, 4.39, 4.42 SC 13.1 to 13.10
03	Incorporate the Green Plan into the Essential Mandatory Training and Induction policies.	Governance & policy	22/23		£		Education Services	NZ 4.2.1
04	Create Green Plan intranet pages for staff access and external webpages for other stakeholders; upload Green Plan content and progress updates accordingly.	Governance & policy	22/23		£	✗	Board Level Net Zero Lead, Infrastructure services	NZ 4.2.1
05	Use the Green NHS 'ONE YEAR ON' Communications Toolkit and/or the ' Healthier Planet, Healthier People ' Toolkit to create and share communications about our Green Plan.	Working with patients, staff & communities	22/23		£		Communications & Engagement	NZ 4.2.1
06	Encourage staff actively participate in the Greener NHS community and other forums such as the Greener AHP Hub, Centre for Sustainable Healthcare and related workspaces on the FutureNHS platform.	Working with patients, staff & communities	22/23		£		Communications & Engagement	NZ 4.2.1
07	Consult, explore and action how clinical and non-clinical staff can best participate in our Green Plan delivery, ensuring this is incorporated into workplans, work-time allocations, performance reviews, and collaborating with other trusts where appropriate.	Governance & policy	22/23		£		Board Level Net Zero Lead, Infrastructure services	NZ 4.2, 4.2.1, 4.2.2, 4.3.3





No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
08	Provide additional training related to this Green Plan to build capability in all staff, including on the link between climate change and health and practical actions that staff can take to help achieve net zero.	Core responsibilities	23/24		£		Education Services	NZ 4.2.1
09	Work with our suppliers to ensure that onsite workers are subject to the Real Living Wage, fair working practices and protections against discrimination.	Procurement & People & OD	23/24		£		Procurement & People & OD	LTP 4.1, 4.3, 4.39, 4.42

Figure 9 Green Plan actions for workforce

Indicative cost:

 No or low cost
  Significantly expensive
 Moderately expensive

Indicative emissions reduction:

 Low or incremental reduction
  Significant reduction
 Moderate reduction
  Not applicable

Sustainable Models of Care

The NHS Long Term Plan updates the NHS service model, with a focus on preventative care in communities and tackling health inequalities, now and in the future. This has been linked to emissions reductions and greener activities.

Our Trust delivers acute and community care to a core population of 430,000 people across South Tyneside and the City of Sunderland, as well as thousands of people from Durham. We also provide a number of community and other services to people in Gateshead and specialist services across the North East.

The National Patient Safety Improvement Programmes and the Investment Impact Fund indicators (IIF) provide underpinning principles for sustainable models of care, such as preventative care interventions and reducing health inequalities. Staff training and empowerment, as detailed in the previous sections, are critical to enhancing sustainable models of care.

Prevention is embedded in the development of all our models of care, internally and with external partners, to address the wider determinants of health and causes of illness. Adhering to the Getting it Right First Time programme (GiRFT) helps to avoid additional hospital bed days and patient and visitor travel to our clinics, and their associated environmental impacts. Strong interagency partnership working enhances GiRFT, providing a better care package.

We use a population needs assessment, JSNA or equivalent to help improve the local systems of care for which we are responsible, to be more sustainable. There is also a principle and

process of making every contact count to keep patients informed, in control, and independent.

We also educate patients about the importance of a balanced diet and benefits to their own health. We signpost vulnerable patients to food banks and other initiatives to improve access to nutritional food.

Our Trust will commit to link GHG reductions with our delivery of the Long Term Plan sustainable care model.



Masked doctor giving vaccine. Source: [Unsplash](#)












No	STSFT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Build on current efforts (GiRFT, National Safety Improvement Programme and CMPP) to reduce health inequalities and improve early intervention, linking this work to potential emissions reductions.	Governance & policy	On-going		£		Board of Directors and relevant clinical leads	LTP 2.26 SC13.9.118.4.2.1 NZ 4.1.3
02	Use the Embedding Public Health into Clinical Services Programme's toolkit and Sustainability in Quality Improvement (SusQI) Framework to ensure the best possible health outcomes with minimum financial and environmental costs, while adding positive social value at every opportunity.	Governance & policy	On-going		£		Board of Directors and relevant clinical leads	LTP 2.26 SC13.9.118.4.2.1 NZ 4.1.3
03	Continue to collaborate with other trusts and public authorities on the population's health.	Governance & policy	On-going		£		Board of Directors	LTP 1.53 SC 18.6 NZ 4.1.3
04	Appoint a Health Inequalities Lead to coordinate delivery of an updated Health Inequalities Action Plan.	Core Responsibilities	22/23		£		Board of Directors	LTP 2.26 SC 13.9.2, 13.10 NZ 4.1.3
05	Follow Greener NHS guidance or support the development of GHG emissions reduction metrics linked with sustainable care actions, including establishing links between better health outcomes and reduction in emissions from avoided care and travel.	Core responsibilities	23/24		£		Estates/ Clinical leads	SC 18.4.2.1 NZ 4.1.1, 4.1.2
06	Work to engage suppliers related to sustainable care in relevant emissions reduction and health equalities activities.	Procurement	23/24		£		Procurement & service providers	NZ 4.1.3
07	Explore new ways of delivering care at or closer to home, meaning fewer patient journeys to hospitals.	Working with patients, staff & communities	On-going		£		Clinical leads	NZ 4.1.1

Figure 10 Green Plan actions for Sustainable care models

Indicative cost:

 No or low cost  Significantly expensive
 Moderately expensive

Indicative emissions reduction:

 Low or incremental reduction  Significant reduction
 Moderate reduction  Not applicable

Digital Transformation

The NHS Long Term Plan commits all NHS bodies to focus on digital transformation by establishing a 'digital front door', enabling digital first care. The [NHS App](#) is one example of this, providing patients with a simple and secure way to access NHS services on their smartphone.

The NHS Planning Guidance requires that at least 25% of all clinically necessary outpatient appointments should be delivered remotely by telephone or video consultation. Streamlining and digitising administrative functions also reduces paper waste and expedites processes.

Our Trust is well-placed to lead the development of digital care as a tool to promote inclusion and increase access to quality care across the region, as we were identified as one of NHSE's original 16 Global Digital Exemplar (GDE) sites, with the objective of becoming "paper-free at the point of care". We are committed to ensuring that digital services are tailored to meet the needs of our different specific care groups. The Government's Greening ICT and Digital Services Strategy 2020-2025 is also taken into consideration when looking at the improvement of our digital care services.

Our fully integrated, digital MEDITECH Electronic Patient Record (EPR) system has been in place in Sunderland since 1993 and has been upgraded over the years. As part of the GDE programme, Sunderland has also achieved the Healthcare Information Management Systems Society (HIMSS) Level 7 accreditation standard, which is the highest achievable accreditation. This internationally recognised accolade

demonstrates that Sunderland Royal Hospital is indeed "paper-free at the point of care", with associated patient safety/outcome benefits, along with staff and organisational efficiencies.

In parallel, South Tyneside was approved as Sunderland's GDE Fast Follower, and has reached HIMSS Level 5. Since merging South Tyneside and Sunderland, we have a single acute EPR offering in use across all hospitals. Efforts are continuing to bring South Tyneside to HIMSS Level 7.

The Trust also stores a significant volume of medical records and paper offsite via several document management companies. The Trust's significantly reduced reliance on historical records is rendering reduced travel between these warehouses and Trust facilities. The Trust has also been actively deploying the EMIS Community Information System, with the same ideal as that of Acute, facilitating our Community staff to be "paper-free at the point of care" with associated patient, organisational and staff benefits.

STSFT is also consolidating its clinical imaging requirements and technologies, with all existing electronic images from Sunderland and South Tyneside being migrated onto a new Agfa PACS infrastructure.

The '[What Good Looks Like](#)' framework', designed to guide Trusts towards the successful integration of digital care systems, neatly summarises:

'The pandemic enabled us to achieve a level of digital transformation that might have otherwise taken several years. As we move into the recovery period, it is critical that we build on the progress we've made and ensure that all health and care providers have a strong foundation in digital practice.'

We consider that the Trust has already fulfilled the majority of the scope and requirements stipulated within What Good Looks Like. However, we are not complacent, and we plan to undertake a further formal and more detailed review of this framework to identify any gaps.

The deployment of MEDITECH, EMIS and other technologies have necessitated change management to modernise the manner in which clinicians and support staff attend to patients.

We have also deployed the MEDITECH Laboratory Information Management System (LIMS) as a part of the Bigger Picture Labs initiative across the Trust and Gateshead Health NHSFT. Paper has thus been eliminated from our systems at Sunderland, and the reliance at South Tyneside is reducing over time, with a goal of not generating any new paper and removing the need for historical paper.



Staff using computer. Source: STSFT Library

Digital Services

Our digital services complement and link to our in-person services. Since the beginning of the pandemic, we have started recording the number of face-to-face, telephone and video consultations. There are now 255,413 appointments per month. However, there will always be a need for face-to-face appointments and consultations for some of our patient groups. In 2020/21, we conducted 9,750 appointments virtually (using platforms such as Attend Anywhere), and we have plans to increase these volumes in future.

Appointment letters are sent digitally, and we use SMS to link to these appointment letters and as reminders for said appointments for most outpatient services. Work is being done to implement this for community services using the EMIS system and for diagnostic and inpatient services scheduled within MEDITECH.

The COVID-19 pandemic has led to a blended working approach, especially for our corporate services and administrative staff – a mixture of office and home-based working. The Trust has invested significantly in central IT infrastructure and peripheral hardware to enable large quantities of our staff to work in an agile manner.

Our response to the COVID-19 pandemic means that remote access and laptops have been deployed to approximately 2,000 of our staff to facilitate flexible working. This is resulting in reduced travel and is also allowing STSFT to consider opportunities of rationalising Estate and offices and reducing the number of offices/desks being used on our sites. However, we must be cautious not to 'outsource' these environmental impacts to our staff. Staff expense claims are also fully digitised.

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Build on our current practice and current online patient guidance, participate in delivery of the Long-Term Plan commitments for digital first primary care and an NHS digital front door, linking this to potential emissions reductions.	Governance & policy	On-going		£	✗	ICT	LTP 1.43, 1.44, 5 NZ 4.1.4
02	Follow NHS guidance on information collection, including any subsequent process for GHG emissions reduction metrics linked with digital-first care actions, such as the CSH's Carbon Calculator for Avoided Patient Travel	Governance & policy	On-going		£	✗	Board Level Net Zero Lead, Infrastructure services	SC 28
03	Offer more digital and remote appointments: set targets against the baseline recorded in 2021.	Working with patients, staff & communities	22/23		£	☁	Care Groups	PG C1
04	Use the What Good Looks Like Framework , the Greening Government: ICT and Digital Services Strategy 2020-25 and The Technology Code of Practice as guides to ensure the Trust has robust ICT systems in place to deliver on digital transformation.	Procurement & ICT	23/24		£	☁	ICT	NZ 4.1.4
05	Build on current practice of engaging staff and care groups in digital care channels, meaning fewer patient journeys.	Working with patients, staff & communities	On-going		£	☁	ICT	NZ 4.1.4 PG C1
06	As an extension to the Trusts GDE programmes, continue with Acute and Community digital activities to further deploy EPRs, rendering the Trust "paper-free at the point of care". In parallel, adopt corporate "paper-free" systems.	Working with patients, staff & communities	On-going		£	☁	ICT	LTP 1.43, 1.44, 5
07	Planned migration of data systems to cloud-based systems. Adoption of staff and patient portals. Continued cyclical replacement programme of IT hardware, with the provision of peripheral hardware to allow staff to work in an agile manner, with associated benefits	Working with patients, staff & communities	23/24		£	☁	ICT & Business & Value	LTP 1.43, 1.44, 5
08	Digital information for patients rather than paper leaflets.	Working with patients, staff & communities	23/24		£	☁	ICT	LTP 1.43, 1.44, 5

Figure 11 Green Plan actions for digital transformation

Travel and Transport

Emissions associated with the Trust's business travel and transport amounted to around 195 tCO₂e or 0.2% of all emissions in 2020/21.

Out of this, we only had data available for our fleet vehicles and therefore the fleet travel makes up 100% of the above figure.

Using the NHS' Health Outcomes Travel Tool (HOTT), most transport-related emissions (11,655 tCO₂e) can be linked to staff commuting and patient/visitor travel.

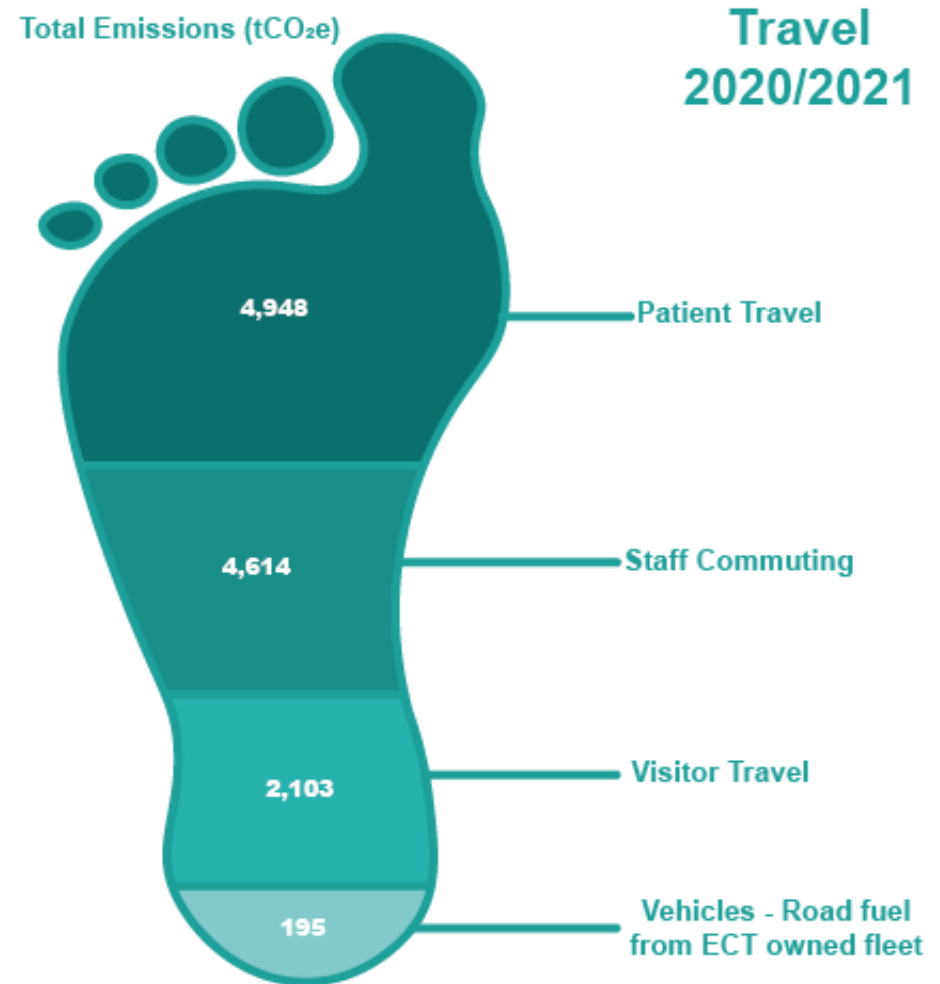


Figure 12 Travel Carbon Footprint Infographic. Please note figures within this graphic are estimated and may not reflect true values (based on the NHS HOTT Tool)

STSFT Fleet Vehicles

We operate a fleet of 112 vehicles, 17% of which are diesel, 6% are electric, 26% are hybrid and 51% are petrol. These vehicles are used by our Estates department for the maintenance and operation of our sites; the secure transportation of patients; and for transporting goods between sites.

In 2020/21, the fuel consumed by these vehicles gave rise to the emission of 195 tCO₂e.

The new NHS Non-Emergency Patient Transport Services (NEPTS) target is to have:

- From 2023, **50%** of all fleet vehicles to be of the latest emissions standards, Ultra-low Emission Vehicles (ULEVs, such as plug-in electric hybrid), or Zero Emission Vehicles (ZEVs, such as electric cars)
- From 2025, **75%** of all fleet vehicles to be of the latest emissions standards, ULEVs or ZEVs
- From 2030, **100%** of all fleet vehicles to be ULEVs or ZEVs, including a minimum of 20% ZEVs

At present, ULEV and ZEV large vans are limited, though more are coming onto the market.

ULEV and ZEV small vans and cars are becoming commonplace, with many options available.

We need to undertake a fleet review to see how our vans and large vans are being used, and whether suitable ULEVs and ZEVs are available. Additionally, we must review the choice of company cars on offer and change the specifications to reflect the targets within the NEPTS.

If we changed all our fleet vehicles to ZEVs, based on 2020/21 data and using 100% renewable electricity, we would see a likely 89% drop in emissions (emissions associated with electric vehicles are due to transmission and distribution losses in the national grid). This would result in total emissions dropping to around 12 tCO₂e per year, with the added benefit of no tail pipe emissions.

Aside from the electrification of transport, we need to reduce emissions from our fleet by 29 tCO₂e by 2024/25, equating to just under 10 tCO₂e per year.



Figure 13 Emissions from fleet vehicles and emissions reduction trajectory to 2024/25

We aim to reduce these emissions by replacing them with two Zero Emission Vehicles (electric vehicles) in April 2022, meeting the new NHS Non-Emergency Patient Transport Services (NEPTS) target of 100% Zero Emission fleet vehicles, 13 years early.

Other Lease Vehicles

Staff have the option to lease personal vehicles.

Emissions from these vehicles (used for staff's personal use) are outside of the scope of this report (though do somewhat impact on emissions arising from commuting). However, as a Trust, we can limit the availability of vehicles on offer based on their engine size and emissions. Furthermore, we can incentivise staff to choose Ultra Low Emission Vehicles (plugin hybrid cars) or Zero Emission Vehicles (electric cars).



Roadside parking Stock image. Source: [Unsplash](https://unsplash.com)

Grey Fleet

We have a 'grey fleet' within our Trust.

Grey fleet refers to employees' own vehicles and/or hire cars used for business purposes. As a Trust that provides care in the community, emissions associated with our grey fleet are sizeable.

We reimburse staff and bank staff for the fuel used in line with their duties through our expenses system.

Unfortunately, our expenses system does not allow for the extraction of relevant data at this time and therefore we cannot determine the emissions of our grey fleet. We will look to amend this in the future.

In 2020/21, with the changed working styles affected by the pandemic, we estimate that our grey fleet emissions will have reduced. In reference to sustainable models of care and digital transformation, this suggests that flexible should continue.

As the electrification of transport continues, the emissions will reduce accordingly. This also brings forth the issue of providing additional electric vehicle charge points in the future.



Cars in carpark. Source: [Unsplash](https://unsplash.com)

Electric Vehicle Charging Infrastructure

We are aware of the importance of electric vehicle charging infrastructure as electric vehicles become more common in the coming years and to encourage their uptake by staff and patients.

Business Travel (public transport)

We reimburse staff for business travel through our expenses system. Unfortunately, our expenses system does not allow for the extraction of relevant data at this time and therefore we cannot determine the emissions of our grey fleet. We will look to amend this in the future.



Car at charging point. Source: STSFT Library

Commuting, Visitor/patient travel

Cycling is further encouraged with the promotion of the 'Ride It Out' challenge in collaboration with 'Love to Ride'. Additionally, the Trust participated in Clean Air Day 2019 with the invitation of 'Dr Bike', offering basic bike repairs, safety checks and improvements. We have cycling storage available at Laureate House, Meadowbrook, Park House, and Prestwich, with plans to expand on this infrastructure and introduce storage at Manor House and Moorside.

The 7% of our staff that travel by bus are supported by the Trust's membership of the First Bus Commuter Travel Club, offering a discount incentive for bus users.

Increasing the number of cycle parking spaces, improving shower/changing facilities, and offering other incentives for active travel will be explored. Public transport provision to or near our sites remains a vital service to the communities we serve and helps to reduce health inequalities.

In lieu of additional travel plan survey data, we have used the NHS' HOTT Tool to estimate the emissions associated with staff commuting and patient and visitor travel. The HOTT Tool uses national and regional datasets to generate figures for transport mode, distances, and emissions from a 2018 baseline and projections into the near future (shown in Figure 14).

However, these figures are indicative and need to be bolstered and verified by local travel plan survey data. Hence, the impacts of COVID-19, with less need for commuting, do not fully feature in the results for 2020/21 and the projected 2021/22 data (the sequentially lower emissions are attributed to improvements in vehicle efficiencies and electrification of transport).

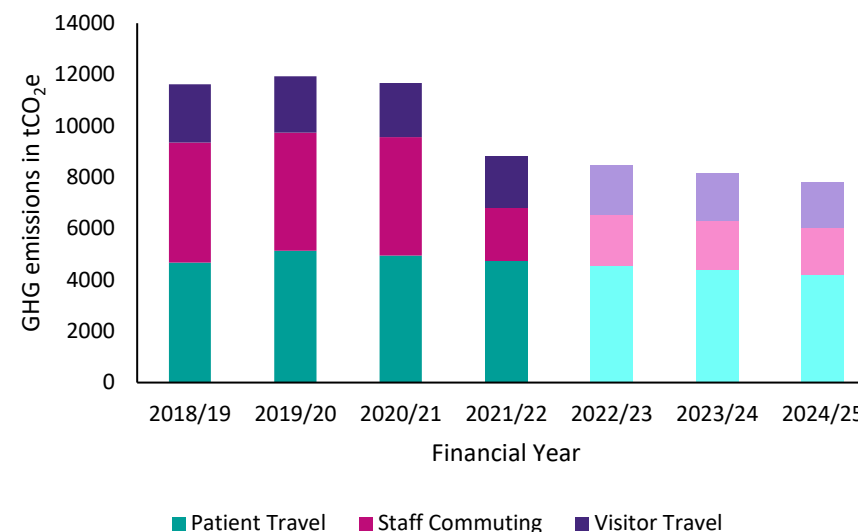


Figure 14 Stacked bar chart to show total emissions from patient, visitor and staff travel and emissions reduction trajectory to 2024/25

More agile working for staff and remote consultations for patients will have a positive impact on reducing travel emissions, air quality and traffic congestion.

Air Quality







Air quality forms a direct link between climate change and health outcomes, and the NHS Net Zero plan calculates that reaching UK ambitions on emissions reductions in line with Paris Agreement targets could save 38,000 lives with improved air quality.

According to the World Health Organisation (WHO), poor air quality leads to over 7 million deaths globally and that 9 out of 10 people worldwide breathe polluted air.

Travel is a key contributor to air pollution, and with as many as 1 in 20 road journeys in the UK attributable to the NHS, our activity has enormous potential impact both on our communities' air quality and our ambition to reduce emissions. Additionally, our gas-fired boilers contribute to air pollution, and the decarbonisation of heating will address these pollutants in the future.



Riding bike to work. Stock Image. Source: [Unsplash](https://unsplash.com)

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Embed an updated sustainable travel plan, with new modal shift targets to be supported by an active travel expenses policy and a facilities review.	Governance & policy	23/24		£		Public Health/ Facilities/ Finance	LTP 2.21, 3.82, 17 SC 18.4.1.3 NZ 3.2, 3.2.2
02	Conduct annual Travel Plan surveys to quantify staff commuting and visitor travel and verify HOTT Tool outputs.	Working with patients, staff & communities	Annual, 22/23		£		Communications	NZ 3.2, 3.2.2
03	Review existing staff lease scheme and incorporate additional incentives for the uptake of ULEV and ZEVs.	Governance & policy	23/24		£		Finance	NZ 3.2, 3.2.2
04	Undertake a Green Fleet review of our fleet vehicles to ascertain usage and distance travelled, with view to integrating ULEVs and ZEVs	Governance & policy	23/24		£		Finance	NZ 3.2, 3.2.2
05	Ensure that any new vehicle purchased or leased are ultra-low emission (ULEV) or zero emission (ZEV) from 2023, in line with the latest NHS non-emergency transport guidance.	Core Responsibilities	23/24		£		Procurement	SC .18.4.1.1, 18.4.1.4 NZ 3.2.1
06	Enhance the staff mileage reimbursement system to extract mileage and collate vehicle type/engine size and fuel type data to allow more accurate emissions foot printing, monitoring and reduction targets.	Governance & policy	23/24		£		Finance	NZ 3.2, 3.2.2

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
07	Enhance the business travel expense system to extract mileage and capture the to- and from- destinations for rail, air, bus, taxi journeys	Governance & policy	23/24		£	✗	Finance	NZ 3.2, 3.2.2
08	Improve stores provision and work with our suppliers to consolidate goods orders through better planning wherever possible, reducing transport emissions.	Procurement	23/24		£	☁	Procurement	NZ 3.2, 3.2.2
09	Work with staff currently home-working under pandemic conditions to explore voluntary blended working.	Working with patients, staff & communities	23/24		£	☁	HR	NZ 3.2, 3.2.2
10	Simplify electric vehicle charging to encourage use of electric vehicles.	Core Responsibilities	23/24		£	☁	Estates	NZ 3.2, 3.2.2
11	Increase the number of electric vehicle charging points to increase capacity.	Core Responsibilities	23/24		£	☁	Estates	NZ 3.2, 3.2.2
12	Review travel plan survey data to determine hubs of travel. Provide mini bus services from key areas at key start times.	Working with patients, staff & communities	24/25		£	☁	Facilities	NZ 3.2, 3.2.2
13	Limit parking permits to people living over 2 miles from the hospital (excluding those transporting equipment or those with a blue badge).	Working with patients, staff & communities	23/24		£	☁	HR & Finance	NZ 3.2, 3.2.2
14	Consider whole life emissions from commuting vehicles during the procurement of vehicles and therefore carbon accounting.	Procurement	24/25		£	☁	Estates and Procurement	NZ 3.2, 3.2.2

Figure 15 Green plan actions for Travel, Logistics and Air Quality

Estates and Facilities

As an NHS Trust, the carbon footprint of our built environment is significant. Overall, the health and care system in England is responsible for an estimated 4-5% of the country's carbon emissions.

As we provide critical services 24 hours a day, our energy and resource consumptions are substantial. Therefore, we need to optimise energy use in our buildings and move away from using fossil fuels to meet NHS Net Zero goals.

Our estate comprises several facilities housed in other Trusts' buildings. This presents challenges to retrofitting resource efficiency measures and heating improvements, and we will work with other Trusts and the aims of their Green Plans to improve efficiencies at these sites.

We will be following the four-step approach within the NHS' 'Estates 'Net Zero' Carbon Delivery Plan' to address our estate:

1. Making every kWh count: Investing in no-regrets energy saving measures
2. Preparing buildings for electricity-led heating: Upgrading building fabric
3. Switching to non-fossil fuel heating: Investing in innovative new energy sources
4. Increasing on-site renewables: Investing in on-site generation

Estates & Facilities: Energy

- **18,539 tCO₂e** emitted from buildings across our estate in **2020/21**.
- We have procured 100% renewable electricity since April 2019.
- We need to reduce energy consumption by over 6,522,000 kWh per year to achieve the emissions reduction target of **15,746 tCO₂e** in **2024/25**.

Energy and emissions

In 2020/21, we had 9 active sites where we were directly responsible for procuring the energy supply contracts. Buildings under our ownership can be targeted for energy efficiency improvements.

Figure 16 shows the total emissions liberated from electricity and gas use from 2018/19 to 2020/21. We need to reduce emissions by 2,793 tCO₂e by 2024/25 from our 2020/21 baseline (this includes the reduction in emissions from procuring renewable electricity).

Sunderland Royal Hospital energy consumption is significant at 11,050 tCO₂e in 2020/21.

Figure 17 shows the energy consumption and emissions from our five sites as bubble graph. The size of the bubble relates to the combined emissions arising from both gas and electricity use at each site. The 'x' axis represents the amount of gas consumption, and the 'y' axis represents electricity use.

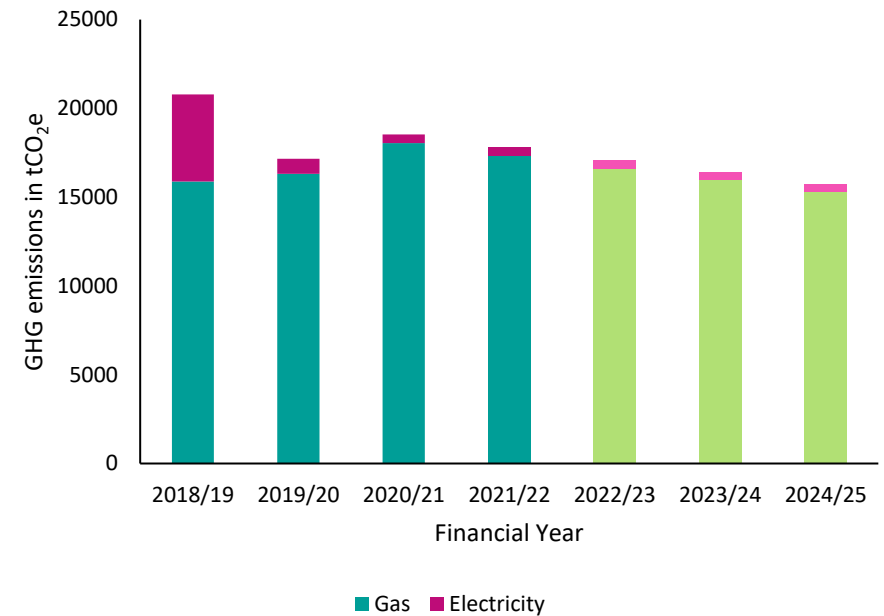


Figure 16 Emissions from our built environment from 2018/19 to 2020/21 and forecast emissions to 2024/25

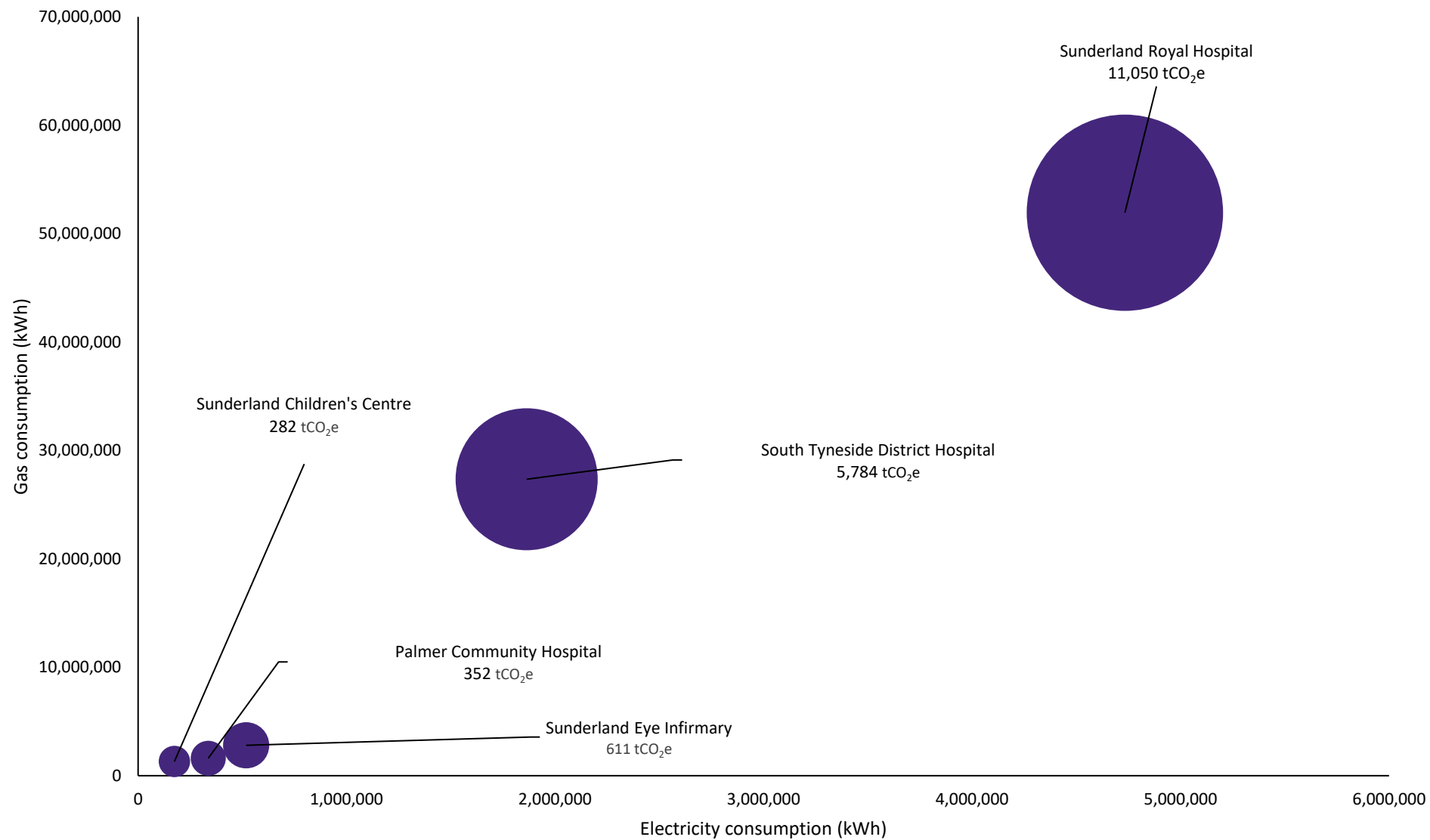


Figure 17 Bubblegraph showing building energy consumption at our top 9 highest emitting sites in 2020/21. The size of the 'bubble' is relative to the GHG emissions

Since April 2019, the Trust has procured 100% renewable electricity, resulting in an 80% reduction in emissions arising from procured electricity. The emission reductions from this are illustrated in Figure 18.

Despite the negated emissions from renewable electricity procurement, we must still reduce both our electricity and gas consumption at all our sites, at a rate of 6,522,000 kWh per year!

The Trust's Building Management System (BMS) is an important tool within the hospital for monitoring and controlling ventilation, lighting, power systems, domestic water, and heating. The BMS is reviewed and monitored on a daily basis.

The Trust sets out to achieve comfortable room / space temperatures for its service users, employees, and visitors using the BMS. Set points such as flow and return temperature are reviewed seasonally or altered in the event of irregular weather. Set points are also controlled by sensors and time schedules, so when areas are unoccupied, they do not use heating or lighting.

Agile home working potentially reduces the amount of office space. As such, more agile working may enable us to rationalise our estate, negating energy use and emissions.



Clarendon Building. Source: STSFT Library

However, we need to continually improve and upgrade our estate.

Detailed building energy surveys will be needed to provide robust energy efficiency recommendations at each of our sites, building upon the works already completed.

The decarbonisation of our heating systems will become increasingly important to reach net zero emissions. We could operate electrically powered direct-expansion/variable refrigerant flow and ground source heat pump systems, electrical radiant ceiling panels and electric point-of use water heaters to provide localised heating, hot water and cooling at our sites.

This transition would inevitably result in much higher electricity consumption, and of particular concern is the viability of increasing the electrical site capacity (load in kilovolt-amps) from the electricity grid. Extensive on-site renewable energy systems, such as solar photovoltaics and integrated large battery storage technologies, would help mitigate this, and provide additional resilience to power outages.

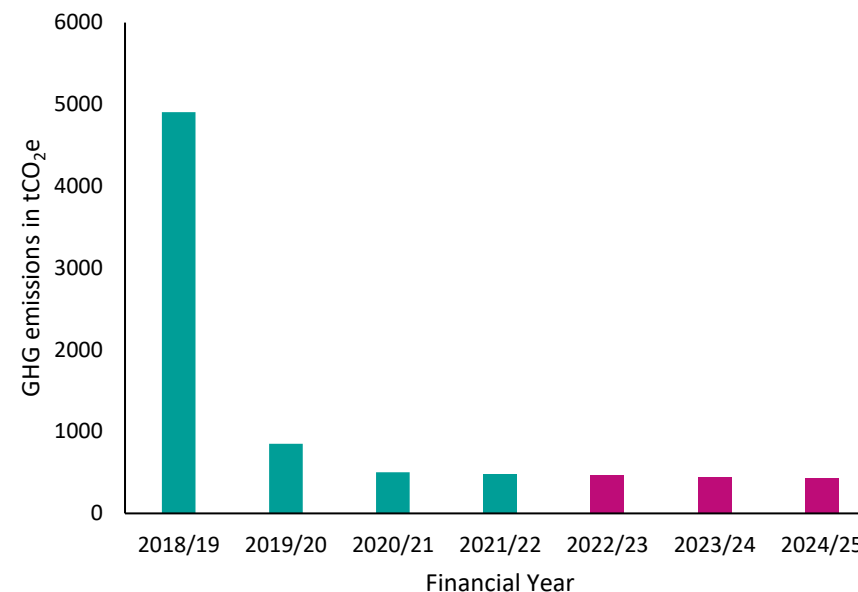










Figure 18 Emissions from electricity consumption and emission reduction trajectory to 2024/25 (note the difference following the procurement of 100% renewable electricity in April 2019)

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Enhance Planned Preventative Maintenance (PPMs) of our facilities and assets to be proactively energy-focused and to identify opportunities to upgrade equipment/plant.	Core responsibilities	22/23		£		Estates	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
02	We currently procure 100% renewable electricity with Renewable Energy Guarantees of Origin (REGO) certificates backed by Npower.	Procurement	22/23		£		Estates	SC 18.5
03	Access the NHS Energy Efficiency Fund (NEEF) to upgrade all lighting to LED alternatives.	Core responsibilities	22/23		£		Estates	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
04	Follow Estates 'Net Zero' Carbon Delivery Plan guidance on efficiency and decarbonisation protocols for the built environment.	Core responsibilities	On-going		£		Estates	NZCDP NZ 3.1.1, 3.1.2
05	Read solar photovoltaic meters and collate a monthly generation report	Governance & policy	22/23		£		Estates	NZCDP NZ 3.1.1, 3.1.2
06	Optimise energy use by embedding networked Automatic Meter Readers (AMRs) across the Estate with appropriate controls to reduce energy consumption, and report sub-metered data monthly	Core responsibilities	23/24		£		Procurement	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
07	Conduct detailed building energy surveys to identify further energy/thermal efficiency opportunities, including the installation of heat recovery systems on Air Handling Units (AHUs) and improving airtightness.	Core responsibilities	23/24		£		Estates	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
08	Develop a Decarbonisation of Heat Plan that focuses on the phase out of existing gas-fired boilers and replacement with low-carbon alternatives, where feasible.	Governance & policy	22/23		£		Board of Directors	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2










No	STSFT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsib le lead/dept.	NHS Req.
09	Explore the possibility of creating District Heat Networks with neighbouring partners.	Working with patients, staff & communities	On-going		£		Infrastructu re Services	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
10	Explore the possibility of using super insulation in our buildings.	Core responsibilities	23/24		£		Infrastructu re Services	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
11	Explore the possibility of using a combination of geothermal power to utilise favourable local geology.	Core responsibilities	24/25		£		Infrastructu re Services	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
12	Explore the possibility of introducing more ventilation heat recovery and recirculating air filtration in our buildings.	Core responsibilities	23/24		£		Infrastructu re Services	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
13	Explore the possibility of installing extensive solar PV with energy storage.	Core responsibilities	23/24		£		Infrastructu re Services	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
14	Look to procure 'green gas' through the Green Gas Certification Scheme as and when existing energy contracts are due for renewal.	Procurement	23/24		£		Procureme nt	SC 18.5
15	Incorporate energy conservation into staff training and education programmes and deliver behaviour-based energy saving campaigns.	Working with patients, staff & communities	23/24		£		HR	NZ 3.1.1
16	Develop communication materials for our patients that highlight energy efficiency projects, discuss plans with the local community, including exploring potential community energy projects.	Working with patients, staff & communities	23/24		£		Estates & HR	NZ 3.1.1
17	Explore how the Trust can implement an ISO 50001 Energy Management System.	Governance & policy	24/25		£		Estates	NZ 3.1.1

Figure 19 Green plan action table for Energy and Emissions from the built environment

Capital Projects

The Built Environment of the NHS influences both the quality of our care and our environmental impact.

How we design and construct our buildings in the future will play a decisive role in our collective ability to achieve net zero.

Buildings have significant environmental impacts in terms of emissions resulting from the use of gas, electricity and water. Improving the energy efficiency of a building is pivotal to reducing these impacts. However, there are embodied carbon emissions within materials, such as cements, steel and glass which are used in the construction of buildings. These indirect 'Scope 3'-emissions are generally much greater than emissions caused by the operation of a building.

Cement and concrete production on its own accounts for a huge 8% of all global greenhouse gas emissions from all sources, according to the [Dutch Environmental Assessment Agency](#).

We have a sustainable capital projects plan/process to ensure all potential opportunities in new builds and major refurbishments are leveraged for sustainable benefit.

Our Trust, furthering a previous commitment to ensure all capital development complies with the Building Research Establishment Environmental Assessment Method's (BREEAM) 'Excellent' or above, ensures that our plans will focus on the reduction of building emissions from all sources.

Estates & Facilities: Capital Projects

- Building energy efficiency standards should be considered for new builds and refurbishments. For example, BREEAM 'Excellent' rating, the Zero Carbon Hospital Standard, and implementation of on-site renewables.
- Construction supplier alignment to net zero commitments, such as on-site contractor measures on waste reduction and low emission construction plans.
- Low carbon substitutions and product innovation, such as lower embodied carbon construction materials.

NHS LTP 16

NHS SC 18.4.2.1,
18.4.2.3

NHS NZ 3.1.1, 3.3.1

8 DECENT WORK AND
ECONOMIC GROWTH



Target 8.5 Full
employment and
decent work with
equal pay

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Target 9.4 Upgrade
all industries and
infrastructures for
sustainability

13 CLIMATE
ACTION



Target 13.1 Strengthen resilience and
adaptive capacity to climate-related
disasters

Target 13.2 Integrate climate change
measures into policy and planning

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Implement the upcoming Net Zero Hospital Building Standard in any new builds and BREEAM 'Excellent' for any major refurbishments.	Governance & policy	On-going		£		Estates	LTP 16 SC 18.4.2.1 NZ 3.1.1
02	Explore options to achieve emissions reductions in smaller works and projects in our acute and primary care estate.	Core Responsibilities	22/23		£		Estates	NZ 3.1.1
03	Ensure capital development accounts for risks identified in climate adaptation plans and addresses these in design/delivery.	Core responsibilities	23/24		£		Estates	SC 18.4.2.3
04	Encourage and measure local subcontractor and supply chain spend as part of our anchor institution approach.	Procurement	22/23		£		Procurement	NZ 3.3.1
05	Work with our Procurement team to enable specification of low and zero carbon materials and designs, as well as achieving waste reduction and other opportunities through contractor engagement.	Procurement	23/24		£		Procurement	NZ 3.3.1
06	Continue to ensure our design process is informed by staff, patients and community views for capital projects.	Working with patients, staff & communities	23/24		£		Estates, Procurement & HR	LTP 16 SC 18.4.2.1 NZ 3.1.1

Figure 20 Green plan action table for Capital Projects

Indicative cost:

£ No or low cost £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:

Low or incremental reduction Significant reduction
Moderate reduction Not applicable

Water Efficiencies

In 2020/21, we used 376,396 m³ of water, which cost a total of £842,938.

There are emission impacts associated with the supply of fresh water and treatment of wastewater, equating to 383 tCO₂e in 2020/21 (see Figure 21).

Although the emissions are low compared to those produced by energy use, being water efficient is important to prevent and alleviate water stress.

As a water efficiency and leak preventative measure, we will look to collate the data from our Automatic Meter Readers water network. This will help us pinpoint areas of high water usage, understand how and where water is being used, locate leaks and take remedial action.

Water conservation and sustainable drainage shall also be explored. Rainwater harvesters collect rainwater for non-potable purposes, such as for flushing toilets. They will help reduce water stress and potentially alleviate flooding by attenuating surface water run-off in storm events.

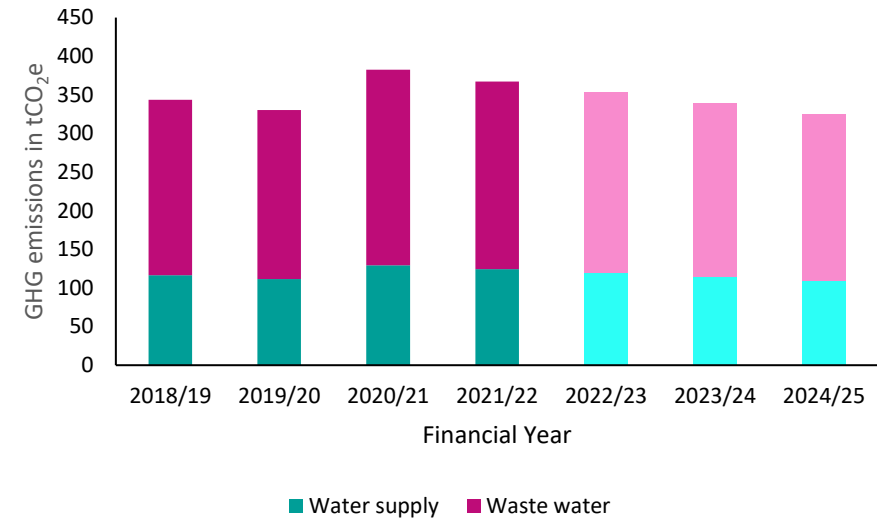


Figure 21 Stacked bar chart to show total water emissions from supply and wastewater treatment, and emissions reduction trajectory to 2024/25

Estates & Facilities: Water

- We used **376,396 m³** of water in 2020/21 – enough water to fill 151 Olympic-size swimming pools.
- **383 tCO₂e** was attributed to the supply of water and wastewater treatment.
- We need to reduce water consumption by **56,705 m³** by 2024/25.
- Water efficiency and sustainable drainage will become ever more important in the future.









No	STSFT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Explore and implement water efficiency targets on areas of the highest impact in our estate and delivery of care.	Governance & policy	On-going		£		Estates	LTP 17 SC 18.4.3.1 NZ 3.1
02	Develop new water intensity metrics and incorporate these into our greenhouse gas emissions reporting.	Governance & policy	22/23		£		Procurement	NZ 3.1
03	Collate water Automatic Meter Reader to determine water use patterns and aid leak detection, and report monthly.	Core Responsibilities	23/24		£		Estates	NZ 3.1
04	Utilise the most water efficient technologies, such as low flow taps throughout our estate, when replacing equipment and developing new sites.	Core responsibilities	23/24		£		Estates	NZ 3.1
05	Explore where rainwater harvesting and grey water systems can be installed and utilised.	Procurement	23/24		£		Procurement	NZ 3.1
06	Look to consolidate the suppliers across the estate to choose one or two that can provide the service, price, and efficiency we expect.	Procurement	On-going		£		Procurement	LTP 17
07	Work with our staff and patients by communicating the importance of water efficiency.	Working with patients, staff & communities	On-going		£		HR	NZ 3.1
08	Incorporate water efficiency measures within our climate change adaptation work with the local community.	Working with patients, staff & communities	23/24		£		Business Continuity	NZ 3.1

Figure 22 Green plan action table for Water


Indicative cost:

£ No or low cost

£ Significantly expensive


£ Moderately expensive

Indicative emissions reduction:

 Low or incremental reduction

 Moderate reduction

 Significant reduction

 Not applicable

Waste and Recycling

We collect five main waste types: general, clinical/offensive, confidential paper, dry mixed recycling and electrical and electronic equipment (WEEE) waste. We have collections for other waste streams, such as metal, fluorescent lamps and waste cooking oil, though amounts collected are not reported.

Figure 23 shows emissions emanating from the waste streams, Figure 24 shows the total waste arisings (all recorded waste streams).

The increase in waste arisings between 2019/20 and 2020/21 can be partly explained by the increased use of disposable items during the COVID-19 outbreak (with an uplift in waste being incinerated as Refuse Derived Fuel (RDF)). However, we have received more robust data from our waste contractors, which may also explain the increase in total waste arisings.

We have dry mixed recycling bins, with the majority of non-clinical and non-hazardous waste being disposed in the general waste bins in the buildings we operate and manage. This general waste is processed as RDF at a treatment centre.

Some of our clinical waste is incinerated (sharps), whilst other types are ultra-high temperature processed (alternative treatment) before being further recycled.

Offensive waste is sent to deep landfill. In 2020/21, the government's emission factor for landfilled waste increased by 360%, which explains the increase in emissions in Figure 23 (whereas the total waste arisings only slightly increase, as shown in Figure 24).

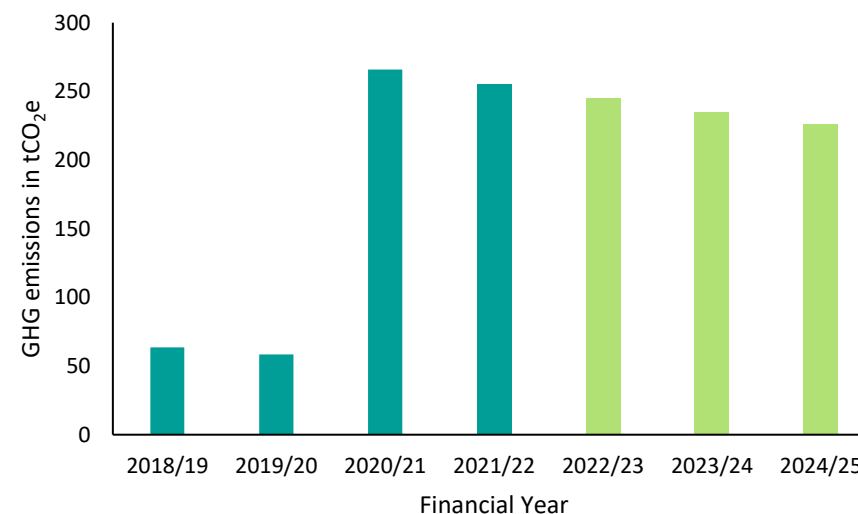


Figure 23 Emissions associated with our waste streams and emission reduction trajectory to 2024/25

Estates & Facilities - Waste:

- **1,558 tonnes** of waste were produced, emitting **266 tCO₂e** in 2020/21.
- **294 tonnes were sent to RDF** in 2020/21, emitting **6.3 tCO₂e**.
- Our General Waste is sorted for recyclable materials at some sites, but most goes to RDF.
- Food waste bins and collections will help lower our emissions in the future.

Food waste (kitchen waste such as vegetable peelings) is disposed of in onsite macerators located at each unit.

We are aware of the amount of waste destined for RDF and need to segregate waste to improve our recycling rates. We can tackle this by changing the terms of our waste contract to ensure that general waste is sorted at the waste handling centre, with recyclable materials being segregated and non-recyclable waste incinerated (as RDF).

The COVID-19 pandemic has led to an increase in the usage of single-use plastic items; a necessary response to managing the crisis. This led to an increase of waste incineration of over 70% in 2020/21 compared to the previous year.

We are mindful of the environmental impacts of single-use items throughout their lifecycle, such as the crude oil used in their manufacture to the difficulty in recycling them at the end-of-use.

Innovations are coming on to the market for reusable Personal Protection Equipment (PPE), such as face masks and aprons, that meet the various clinical safety standards. These alternatives should be explored to help reduce waste arisings.

The waste hierarchy of Reduce, Reuse, Recycle, Recovery (energy from waste) before disposal (landfill) must be embedded to ensure we are maintaining our waste duties of care and circular economic principles. We need to improve our recycling rates. Shoring up our waste handling processes will ultimately reduce greenhouse gas emissions from waste treatment, other negative environmental impacts and landfill disposal costs.

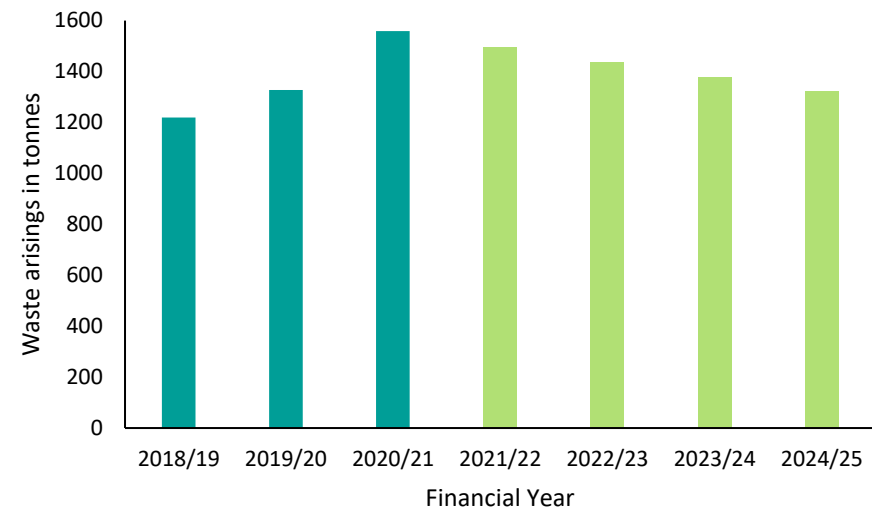


Figure 24 Total waste arisings in tonnes, and weight reduction trajectory to 2024/25

No.	STSFT Green Plan Actions	Trust Area	Target year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible Lead/Dept.	NHS Req.
01	Collate all waste stream data from all sites (including sites we are not responsible for waste collection) and produce monthly reports.	Core Responsibilities	22/23		£	✗	Estates	NZ 3.1
02	Ensure that single-use items in catering adhere to current legislation and elect to use sustainable alternatives as listed by NHS Supply Chain.	Core Responsibilities	22/23		£	☼	Estates	LTP 17 SC 18.4.3.1 NZ 3.1
03	Install Dry Mixed Recycling (DMR) bins across all sites and start DMR collections.	Core Responsibilities	23/24		£	☼	Estates	LTP 17 SC 18.4.3.1 NZ 3.1
04	Install food waste bins across all remaining sites and start food waste collections. Eliminate food macerators.	Core Responsibilities	23/24		£	☼	Estates & Catering	NZ 3.1
06	Work with our staff and patients by communicating the importance of waste segregation.	Procurement	On-going		£	✗	Waste Management/Comms	NZ 3.1
07	Explore whether reusable alternatives to single-use PPE items (aprons, wipes, face masks) are clinically appropriate.	Core Responsibilities	23/24		£	☼	Clinical Teams & Procurement	NZ 3.1
08	Explore how the Trust can implement an ISO14001 Environmental Management System.	Governance & policy	23/24		£	☼	Estates & HR	LTP 17 SC 18.4.3.1 NZ 3.1
09	Explore the recycling of PPE such as facemasks.	Core Responsibilities	23/24		£	☼	Procurement	NZ 3.1
10	Reduce single use plastic by lobbying manufacturers to reduce packaging.	Core Responsibilities	23/24		£	☼	Procurement	NZ 3.1

Figure 25 Green plan action table for Waste

Indicative cost:

£ No or low cost £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:

☼ Low or incremental reduction ☼ Significant reduction
☼ Moderate reduction ✗ Not applicable

Biodiversity and Greenspace

“Access to greenspaces have positive mental and physical health impacts, and these beneficial effects are greatest for those from socioeconomically disadvantaged groups. However, these groups also have the least access to greenspaces.” – Delivering a Net Zero NHS

Our Trust wants to protect biodiversity within our estate and region and reduce our negative impact on biodiversity, both locally and globally.

Greenspace and nature are important for the health and wellbeing of patients and colleagues alike. At a global scale, greenspace affects the planet's ability to absorb carbon dioxide.

Our Trust will promote access to greenspace, considering areas of operations where this may be lacking.

We will also consider opportunities and risks for biodiversity in the areas we operate, for example priority woodland areas in our region.

We have a board approved greenspace and biodiversity action plan and work closely with our local strategic partnership to protect and promote greenspace across the local area. Walking routes have been planned across the estate to encourage staff and patient engagement with greenspace.

The Trust also provides space for the growth and cultivation of food, and staff and patients are engaged in gardening.



Trees and lawn outside St Benedict's Hospice. Source: STSFT Library



LTP 17



SC 18.4.3, 18.4.3.1 to 18.4.3

NZ 3.1.1, 3.3.2



Target 11.6 Reduce the environmental impacts of cities, focusing on air quality and waste



Target 3.9 Reduce illnesses and deaths from hazardous chemicals and pollution



Target 13.2 Integrate climate change measures into policy and planning

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review our policies and practices around green space and biodiversity, to ensure that our impact on these is reduced. Identify opportunities to provide safe and easy access to green space, where appropriate.	Governance & policy	23/24		£	✗	Estates	LTP 17 SC 18.1 NZ 3.5
02	Engage with regional partners to ensure that adequate green space and identified native species are considered and supported in planning and operations of our estates wherever possible. This includes supporting bees and other pollinators.	Core responsibilities	23/24		£		Estates	SC 18.1 NZ 2.2, 3.5
03	Work to better understand biodiversity and habitat risks and opportunities in our procurement. Where possible, apply evidenced standards or engage with our suppliers to address issues, such as food production and provenance of meat, avoiding Palm Oil or limiting to RSCO-certified Palm Oil in food and cleaning products.	Procurement	23/24		£		Procurement	SC 18.1
04	Continue to engage our staff, patients, and communities in green space initiatives.	Working with patients, staff & communities	On-going		£	✗	Clinical leads & HR	NZ 2.2, 3.5

Figure 26 Green plan action table for Greenspaces

Indicative cost:

£ No or low cost £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:

Low or incremental reduction Significant reduction
Moderate reduction ✗ Not applicable

Medicines – Volatile Anaesthetic Gases and Inhalers

In addition to carbon dioxide emissions, NHS' clinical activity and prescriptions, such as using inhalers, nitrous oxide and volatile inhaled anaesthetics like desflurane, contribute a considerable proportion of the NHS' GHG footprint.

The Long Term Plan commits the NHS to reduce GHG emissions from anaesthetic gases by 40% (which on its own could represent 2% of the overall NHS England carbon footprint reduction target that the NHS must meet under Climate Change Act commitments) and significantly reduce GHG emissions by switching to lower global warming potential (GWP) inhalers.

Volatile anaesthetic gas and inhaler data were unavailable and therefore lie beyond the scope of this Green Plan. In future, the Trust will strengthen our internal communications to account for the emissions of our medicines and improve the reliability of our carbon footprint.

Medicines: Volatile anaesthetics and inhalers

We will strengthen our internal communications to collate our medicines data.



Medical Equipment stock image. Source: [Unsplash](https://unsplash.com/)

Nitrous oxide

There are innovations in capturing and catabolising exhaled nitrous oxide, including 'cracking' devices. Such devices are being trialled by other NHS trusts, and if rolled out, will dramatically reduce the amount leaking into the atmosphere.

Furthermore, nitrous oxide use is steadily falling in surgery across the NHS, as more efficacious anaesthetic and analgesic agents are superseding its use. However, Entonox™ or Equanox™ still plays an important role in maternity.

Methoxyflurane (Penthrox™) pen-inhalers are used to treat moderate to severe pain associated to trauma in Accident and Emergency departments. Methoxyflurane can be self-administered under medical supervision, in a similar fashion to nitrous oxide. It has a lower global warming potential (GWP) than nitrous oxide and switching to methoxyflurane would lessen emissions at point-of-use.

However, this comes at a cost, as methoxyflurane is delivered in non-reusable 3ml inhaler pens, creating additional non-recyclable waste.



Medical gas canister stock image. Source: [Unsplash](https://unsplash.com)

Desflurane

Desflurane is a fluorinated volatile anaesthetic. Like many fluorinated compounds (such as refrigerants and propellants), it has a very high GWP. Desflurane has a GWP rating of 2,540, which means it is 2,540 more potent as a greenhouse gas than carbon dioxide.

Other volatile anaesthetics, such as sevoflurane and isoflurane have far lower GWP ratings, 130 and 510 respectively. Shifting away from desflurane to these alternatives will significantly reduce emissions. However, both sevo- and isoflurane use will have an impact on the atmosphere.

The NHS Standard Contract and engagement efforts with clinicians have targeted a reduction of desflurane as a percentage of all volatile gas use by volume, from 20% in 2020/21 to 10% in 2021/22 across all NHS providers.



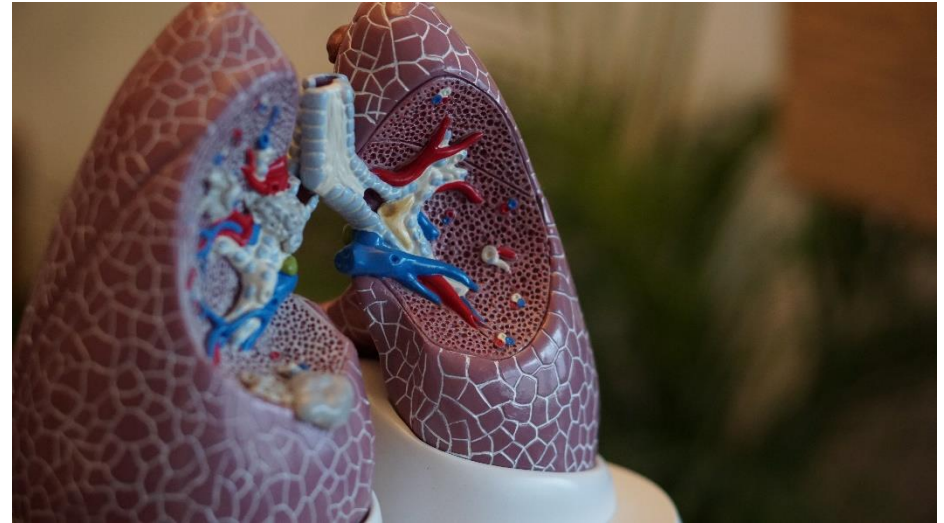
Theatre stock image. Source: [Unsplash](https://unsplash.com)

Inhalers

Dry-powder (DPI) and Metered Dose Inhalers (MDI) are prescribed in the NHS. The NHS Standard Contract stipulates that 30% of all inhalers prescribed across NHS England should be DPIs, potentially saving 374 ktCO₂e per year, according to the NHS Net Zero report.

New [Impact and Investment Fund \(IIF\) indicators](#) which have been released provide an additional steer on prescribing lower-carbon inhalers.

Dry-powder inhalers are an appropriate choice for many patients and contain as little as 4% of the GHGs emissions per dose compared with MDIs. Fluorinated gases in MDIs mean that each 10ml to 19ml inhaler cannister has the equivalent emissions of 30 to 80kg of carbon dioxide!



Lungs stock image. Source: [Unsplash](#)

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Collate inhaler prescribing data and report quarterly.	Working with patients, staff & communities	22/23		£	✗	Clinical Pharmacy Team and clinical leads	LTP 17
02	Collate volatile anaesthetic gas use data and report quarterly.	Working with patients, staff & communities	22/23		£	✗	Clinical Pharmacy Team and clinical leads	LTP 17
03	Collate methoxyflurane (Pentrox™) use data and report monthly.	Working with patients, staff & communities	23/24		£	✗	Clinical Pharmacy Team and clinical leads	LTP 17
04	Explore the procurement and use of nitrous oxide 'cracking' devices.	Procurement; Working with patients, staff & communities	23/24		£	☁	Procurement	LTP 17 SC 18.4.2.2 NZ 3.4.1
05	Switch to methoxyflurane (Pentrox™) in preference to nitrous oxide analgesia/anaesthesia where clinically appropriate.	Working with patients, staff & communities	23/24		£	☁	Clinical Pharmacy Team and clinical leads	LTP 17 SC 18.4.2.2 NZ 3.4.1
06	Work with our anaesthetists and pharmacy to significantly reduce the use of desflurane in surgical procedures to less than 10% of total volatile anaesthetic gas by volume.	Working with patients, staff & communities	23/24		£	☁	Clinical Pharmacy Team and clinical leads	SC 18.6 NZ 3.4.1
07	Set a target of prescribing at least 50% DPIs for all inhaler types.	Working with patients, staff & communities	23/24		£	☁	Clinical Pharmacy Team and clinical leads	NZ 3.4.1
08	Set a goal to reduce MDIs to 25% of all non-salbutamol inhalers by prescribing DPIs and soft mist inhalers, where clinically appropriate	Working with patients, staff & communities	24/25		£	☁	Clinical Pharmacy Team and clinical leads	IIF ES-01 LTP 17
09	Set a goal of reducing the average emissions from salbutamol inhalers to 11.1kg per inhaler, where clinically appropriate	Working with patients, staff & communities	24/25		£	☁	Clinical Pharmacy Team and clinical leads	IIF ES-02 LTP 17
10	Work with our clinicians and Clinical Pharmacy Team to enable uptake of alternative inhalers where appropriate.	Governance & policy	On-going		£	☁	Clinical Pharmacy Team and clinical leads	SC 18.6 NZ 3.4.1

Figure 27 Green plan action table for inhalers

Supply chain and procurement

The NHS is a major purchaser of goods and services, with NHS England alone procuring around £30 billion of goods and services annually. Procurement has major potential social, economic, and environmental impacts both locally and globally.

This includes the power of using local suppliers, the climate performance of our equipment and estate, and preventing modern slavery in supply chains.

STSFT is committed to engage with our suppliers to meet the Green Plan and support the sustainable procurement objectives of NHS England wherever practicable.

Procurement and Climate Action

Our supply chain emissions represent a huge portion of STSFT's overall carbon footprint. We have baselined our estimated supply chain emissions for 2020/21 utilising the GHG Protocol 'Scope 3' spend-based method. Spend-based emissions change yearly with total spend and will not help measure progress initially. However, they will help STSFT to identify our carbon hotspots to plan for actions.

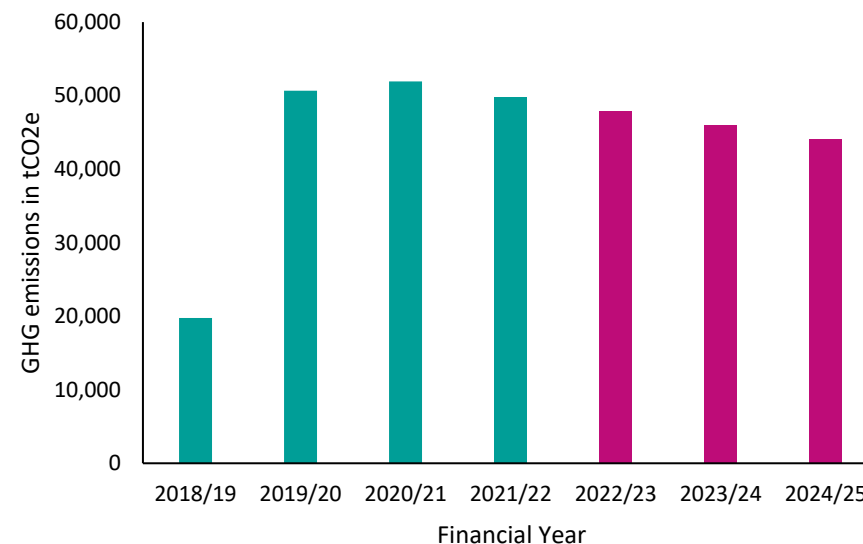


Figure 28 Emissions from our supply chain with reduction trajectory to 2024/25

Supply Chain and Procurement

- Emissions from our supply chain were estimated to be **51,917 tCO₂e** in 2020/21.
- A new NHS Sustainable Supplier Framework will be launched in January 2022 and will require all suppliers to publish progress reports and continued carbon emissions reporting by 2030.
- An ISO 20400 Sustainable Procurement Strategy would enhance the -environmental and social performance of -the Trust's supply chain.
- Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts in April 2022 and 2023 respectively.
- Reusable items such as face masks and aprons would reduce waste (as per the Waste section).
- Reclaiming mobility aids and other devices from patients will prevent waste and save money.

As a Trust, we procure most items and services through centralised NHS/government frameworks, such as NHS Supply Chain. These centralised frameworks already provide best value through bulk purchasing power and consolidation of orders. We cannot control or influence the sustainability aspects of these routes of procurement and will benefit from the decisions made in how these frameworks operate.

In addition, the Trust is a signatory of the NHS Single Use Plastics Pledge aims to reduce plastic catering consumables during 2021/22.

The NHS, in line with recent government requirements, is mandated to adopt a new social value and environmental standard in the future. A new Sustainable Supplier Framework will be launched in January 2022, and from April 2022, all NHS tenders will include a minimum 10% net zero and social value weighting (as per [Policy Procurement Note 06/20](#)).



Supplying boxes with PPE stock image. Source: [Unsplash](#)

From April 2023, contracts above £5 million will require suppliers to publish a carbon reduction plan for their direct emissions as a qualifying criterion (as per [Policy Procurement Note 06/21](#)).

By 2030, all suppliers will be required to demonstrate progress in-line with the NHS' net zero targets, through published progress reports and continued carbon emissions reporting.

PPN 06/020 & PPN 06/021 are procurement policy notices that relate to Central Government Departments, their Executive Agencies and Non-Departmental Public Bodies, STSFT as an organisation is not yet directly in scope.

These additional requirements will enable us to determine the carbon and social impact of the products and services that we buy more accurately, and ensure suppliers are reducing the emissions associated with their operations and products.

In the interim, we will explore ways to reduce single-use plastic items and research how we can incorporate reusable items such as masks and aprons into our clinical practice.



Stock warehouse stock image. Source: [Unsplash](#)

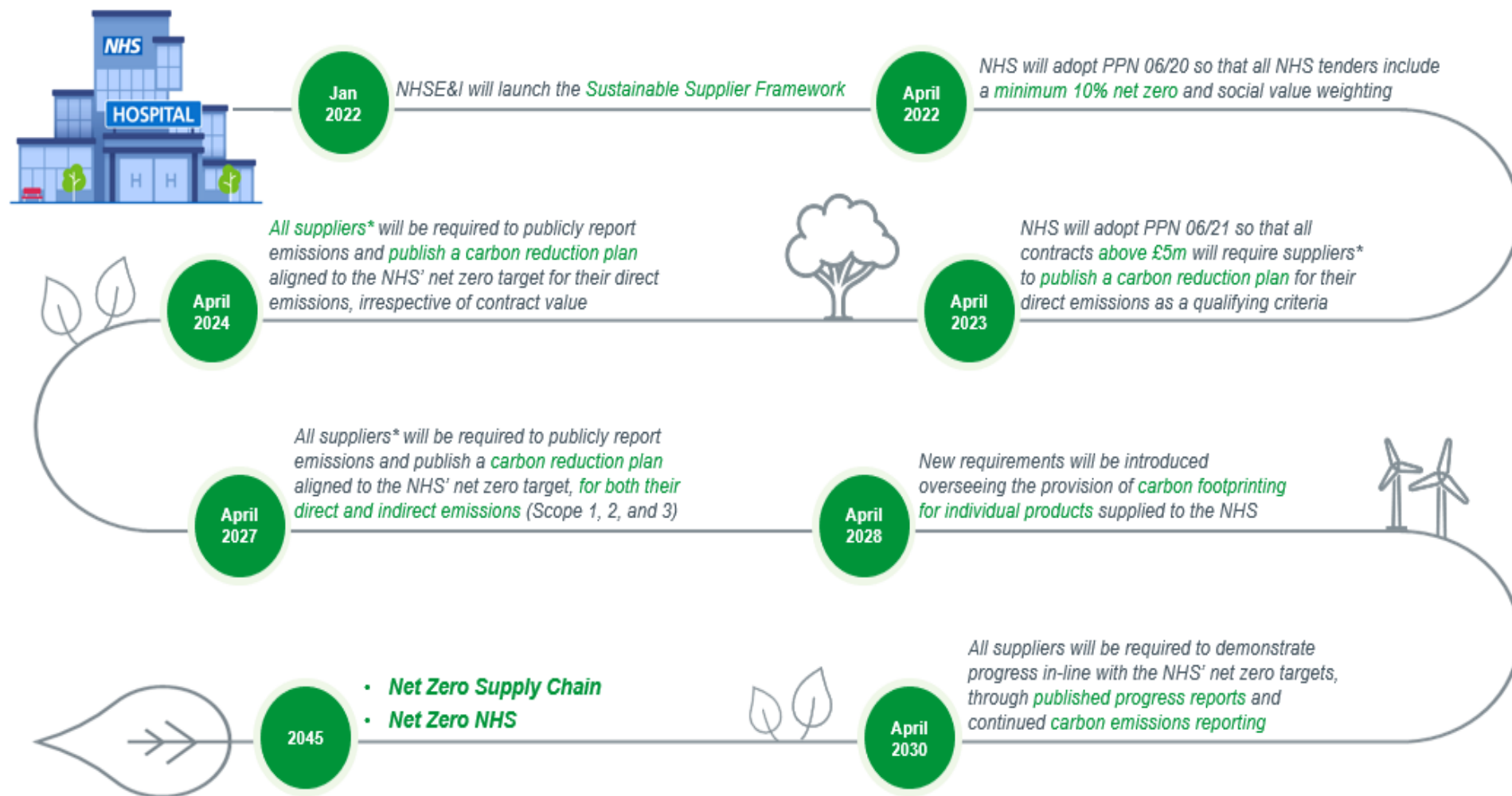


Figure 29 Building net zero into NHS Procurement – shows how NHS England will require all suppliers to provide carbon and social value reporting by 2030

Product retainment and lifecycle extension

Procuring well, ensuring best value for money and social and environmental benefits, will remain a core principle for the wider NHS and our Trust.

However, keeping products in service for as long as possible, through maintenance and repair, is fundamental to a circular economy and drives down waste.

Critical care medical products are kept in good working order at our Trust, as per manufacturer's and the Medical and Healthcare Products Regulatory Agency's (MHRA) guidance. Only when an item is no longer supported by the manufacturer, or is beyond economic repair, do we consider disposal.

Mobility aids, such as walking frames, bariatric chairs and wheelchairs, are given to outpatients where appropriate. Unfortunately, once issued, these items are no longer under our control. Though many outpatients will use mobility aids for the long term, many are only used for weeks or months, and we have no way of reclaiming these mobility aids. Ultimately, these items end up in outpatients' domestic waste. Mobility aids are robust pieces of kit, with long service lives.

Reclaiming, cleaning/refurbishing and reissuing mobility aids will negate useful items being scrapped.



Heart rate monitor machine stock image. Source: [Unsplash](https://unsplash.com)

community benefits are met.

not reserve spend locally, we do take proactive steps inclusive growth, including a policy on the payment of ng Wage for our service suppliers.

England Sustainable Procurement Objectives		
	Modern Slavery	Social Value
NHS n Net s	Eliminate Modern Slavery in the NHS supply chain both domestically and abroad	Ensure NHS procurement is a force for good helping local economies and improves wider determinants of health

England Sustainable Procurement Objectives Source: website

NHS Sustainable Procurement Objectives Source: website

NHS Sustainable Procurement Objectives Source: website

NHS Sustainable Procurement Objectives Source: website



stop sign stock image. Source: [Unsplash](#)



NZ 3.3, 3.3.1



Target 8.7 End modern slavery, trafficking, and child labour



Target 12.7 Promote sustainable public procurement practices



Target 13.2 Integrate climate change measures into policy and planning

No	STSFT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review our sustainable procurement approach to find relevant links that enable our Green Plan and work closely with NHS Supply Chain and NHS Improvement to promote their sustainability programmes.	Governance & policy	Ongoing		£	✗	Procurement	LTP 6.17, 17
02	Identify wider social, economic and environmental benefits for the local community and population when considering the purchase and specification of products and services, discussed and agreed with the Coordinating Commissioner.	Governance & policy	23/24		£	✗	Procurement	SC 18.6
03	Adhere to the requirements of the NHS Sustainable Supplier Framework.	Governance & policy	January 2022		£	☁	Procurement	SC 18.6
04	Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts from April 2022 and 2023 respectively.	Governance & policy	April 2022		£	☁	Procurement	NZ 3.3, 3.3.1
05	Ensure tenders adopt the carbon management PPN 06/21 in major contracts in April 2023.	Governance & policy	April 2023		£	☁	Procurement	SC 18.6
06	Ensure the purchase of 100% closed-loop recycled paper.	Core Responsibilities	22/23		£	☁	Procurement	SC 18.6
07	Create a new system for cataloguing and reclaiming mobility aids and other devices from patients.	Governance & policy	23/24		£	☁	Physio and Occupational Therapy	NZ 3.3, 3.3.1
08	Engage a key supplier on plans to align their operations and delivery with NHS Net Zero targets over time. Leverage NHS England and NHS Improvement Supplier Engagement Strategy approach for fostering partnerships.	Core responsibilities	23/24		£	✗	Procurement	NZ 3.3, 3.3.1
09	Work to identify impactful future supply chain emissions reductions opportunities and links to climate adaptation and other Green Plan commitments in procurement specifications and through contract delivery	Procurement	24/25		£	✗	Procurement	NZ 3.3, 3.3.1

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
10	Work with NHS Supply Chain to address Modern Slavery and domestic and international supply chain environmental, and human rights risks, including those linked to PPE.	Procurement	23/24		£	✗	Procurement	SC 18.6
11	Explore the creation of an ISO 20400 Sustainable Procurement Strategy.	Procurement	23/24		£		Procurement	SC 18.6
12	Enable procurement to support Social Value and Anchor Institution NHS aims, e.g., understanding and increasing local, SMEs and social enterprise spend or collaborating with suppliers to promote positive action in equalities or to collaborate on innovation or climate action.	Working with patients, staff & communities	Ongoing		£	✗	Procurement	LTP 18

Figure 31 Green plan actions for supply chain management and procurement

Indicative cost:

£ No or low cost £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:

Low or incremental reduction Significant reduction
Moderate reduction ✗ Not applicable

Food and nutrition

Food illustrates the links between climate change and public health. The NHS Long Term Plan commits us to promote plant-forward diets and reduce unhealthy options like sugary drinks on NHS premises. Not only will these actions help prevent obesity and non-communicable disease, but they will also play a role in reducing our greenhouse gas emissions and environmental impact.

Food production accounts for up to 26% of global greenhouse gas emissions¹. Food and livestock production has a huge impact on biodiversity as well, and according to research collected by [Our World in Data](https://ourworldindata.org/our-world-in-data) “of the 28,000 species evaluated to be threatened with extinction on the IUCN Red List, agriculture and aquaculture is listed as a threat for 24,000 of them”.²

While promoting healthier foods and reducing emissions, the NHS can also source more food from local and regional producers where possible, increasing the positive economic impact for our communities and reducing the emissions associated with food transport.

STSFT will work to fulfil Long Term Plan priorities for food provision on our premises, promoting plant-forward diets, higher welfare and more sustainable food options, and supporting regional producers wherever we can.

¹ <https://ourworldindata.org/environmental-impacts-of-food>



Catering Staff. Source: STSFT Library

² Source: Poore, J., & Nemecek, T. (2018). [Reducing food's environmental impacts through producers and consumers](https://ourworldindata.org/our-world-in-data). *Science*, 360(6392), 987-992. Via <https://ourworldindata.org/environmental-impacts-of-food>

At South Tyneside, we served 345,600 meals in 2020/21 (3 meals per day), which averages out at 29,000 meals per calendar month. In previous waste audits, we have ascertained that 43,200kg of food is wasted per year, 3,600kg per month and 120kg per day. This translates into 1.9% of all meals ending up as waste. At Sunderland, we served 851,466 meals to patients and 175,000 meals to staff. Food waste was determined at 2,000kg per year, with 5.2% being wasted.

We offer a wide choice of meals across both sides of the Trust for inpatients, including vegetarian and vegan options and other dietary requirements. Sunderland's menu is 30% plant forward.

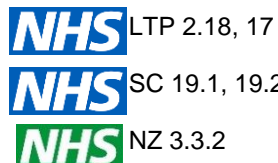
After signing the NHS' Single Use Plastics Pledge, we removed all the single-use plastic products from our catalogue.

The menus across the Trust are currently paper-based, but we will look into digitising the menu. At Sunderland, meal orders are collated digitally before being fulfilled.

Sunderland also supplies all of the patient and staff meals, therefore having total influence over the food and beverage products procured. Locally sourced products are a key priority in this instance. Patient meals are packed in single use boxes made from recyclable material to prevent high energy usage cleaning processes. We track the food miles, consumption patterns and disposal of food and drink products for staff and patients.



Cafe Staff. Source: STSFT Library



2 ZERO HUNGER
Target 2.2 End all forms of malnutrition (including obesity)



3 GOOD HEALTH AND WELL-BEING
Target 3.4 Reduce mortality from non-communicable diseases and promote mental health



13 CLIMATE ACTION
Target 13.2 Integrate climate change measures into policy and planning



14 LIFE BELOW WATER
Target 14.4 Sustainable Fishing

No	STSFT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review food and catering to explore opportunities to push forward Long Term Plan plans to address obesity, benefit STSFT's local area, and reach Net Zero emissions.	Governance & policy	On-going		£	✗	Catering Services	LTP 2.18, 17 SC 19.1, 19.2 NZ 3.3.2
02	Phase in more plant-forward diets and other updated NHS requirements and explore greater seasonal menu changes.	Governance & policy	23/24		£		Procurement & Catering Services	LTP 2.18
03	Continue to serve zero-sugar drinks at our facilities and fulfil other updated NHS requirements.	Core Responsibilities	23/24		£		Catering Services	SC 19.3
04	Explore a digital meal system for at least one NHS site to enable accurate meal planning and reduce food waste.	Core responsibilities	22/23		£		Estates & Catering Services	NZ 3.3.2
05	Work with NHS Supply Chain to ensure positive impacts from contract management and maintain updates to Government Buying Standards sustainable food criteria.	Procurement	23/24		£		Procurement & Catering Services	SC 19.3
06	Work with regional partners to identify opportunities for local and SME food producers.	Procurement	On-going		£		Procurement	NZ 3.3.2
07	Ensure all food providers meet or exceed the requirements outlined in Report of the Independent Review of NHS Hospital Food	Core responsibilities	23/24		£		Facilities & Procurement	SC 19.3
08	Review internal and NHS strategies for sustainable food procurement, including sustainable fish, elimination of palm oil or limit to RSPC-certified palm oil and Fairtrade items where relevant.	Procurement	23/24		£		Procurement	LTP 17
09	Continue to work with patients and partners on the link between food, health and obesity, as well as the emissions impact.	Working with patients, staff & communities	On-going		£	✗	Catering Services	LTP 2.18 SC 19.1, 19.2 NZ 3.3.2

Figure 32 Table to show green plan actions for food and nutrition

Indicative cost:

£ No or low cost £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:

Low or incremental reduction Significant reduction
Moderate reduction ✗ Not applicable

Adaptation

Climate change will make extreme weather, such as heatwaves, droughts and flooding, more prevalent. Sea-level rise and increased risk of Vector Borne Diseases, such as Lyme Disease, may also impact our local communities. Projected sea level rise may affect some of our sites or population catchments due to proximity to the sea.

The changing climate poses risks for vulnerable populations in our community, but also impacts our Trust's estate, ability to operate and supply chain.

We already engage with other public authorities and partners in tackling extreme weather events, such as heat waves and flooding. STSFT will analyse these risks and develop actions for our care delivery, estate planning and management, including flood risks across our estate and service area.

Climate change has serious implications for our health, wellbeing, livelihoods, and society. Its direct effects result from rising temperatures and changes in the frequency and strength of storms, floods, droughts, and heatwaves — with physical and mental health consequences ([The Lancet, 2017](#)).

The NHS Long Term Plan reinforces the requirement to embed resilience and sustainability into our healthcare services. Climate change adaptation is critical to achieving this. The impacts of climate change on our health, services, infrastructure and our ability to cope with extreme weather events will place significant additional demands on our services in the future.

Climate change adaptation in the NHS is about organisational resilience and the prevention of avoidable illness, embracing

every opportunity to create a sustainable, healthy and resilient healthcare service. Reducing our impact on the environment may not only help to mitigate against climate change, but reduce our organisational running costs, ensure business continuity, and reduce health inequalities. Above all, it's about ensuring that the NHS, our buildings, our services, our staff and our patients are prepared for what lies ahead.

There is some uncertainty in the specific impacts of climate change on the South Tyneside and Sunderland region. Our buildings may need cope with either a 3°C temperature drop or a 1.5°C rise. This will be considered in a sensitivity analysis report.

South Tyneside and Sunderland Trust will work with partner organisations and other public sector organisations to develop a climate change adaptation plan to mitigate against the consequences of climate change to health and service delivery.

Climate Change Adaptation

“As climate change accelerates globally, in England we are seeing direct and immediate consequences of heat waves and extreme weather on our patients, the public and the NHS. Adaptation is the process of adjusting our systems and infrastructure to continue to operate effectively while the climate changes. It is critical that the NHS can ensure both continuity of essential services, and a safe environment for patients and staff in even the most challenging times.” - [Greener NHS](#)

No	STSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Responsible lead/dept.	NHS Req.
01	Appoint a Climate Change Adaptation lead and follow the recommendations of the third Health and Social Care Sector Climate Change Adaptation Report.	Governance & policy	23/24		£	Board of Directors	LTP 17 SC 18.4.2.3 NZ 1
02	Embed Climate Change as a strategic risk within our corporate risk register and manage appropriately	Governance & policy	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
03	Create an ISO14090 Climate Change Adaptation Plan, including plans for adapting our premises to mitigate climate change and extreme weather risks, using a recognised methodology, that is routinely reviewed considering the changing climate and scientific advancements.	Core responsibilities	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
04	Work with NHS Supply Chain to better understand the climate change risks in our supply chain and proactively seek to make our supply chain 'climate-ready'.	Procurement	23/24		£	Procurement	SC 18.4.2.3 NZ 1
05	Embed and adapt existing health-related contingency planning, such as Heat Wave Plans to reflect predicted climate change impacts.	Working with patients, staff & communities	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
06	Incorporate newly emerging climate-related health care risks into our contingency planning, such as the increasing prevalence of Vector Borne Diseases	Working with patients, staff & communities	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
07	Produce a climate sensitivity analysis report to address uncertainty in climate and weather changes as a result of climate change.	Core responsibilities	22/23		£	Business Continuity	LTP 17 SC 18.4.2.3 NZ 1

Figure 33 Table to show green plan actions for climate adaptation

Conclusion

This Green Plan is a living document and will be regularly reviewed for progress against the action plans. As such, actions and targets may be revised where necessary.

Adequate budgets and resources will be allocated to achieve our goals and deliver sustainable care. We will look to achieve the 'quick wins' first, although significant investment will be required in future years, especially in making our buildings 'climate-ready'.

Climate Change poses many threats to our care population and how we deliver care. This Green Plan will enable us to become an adaptable and resilient organisation. It will help steer our direction of travel with other local anchor institutions, bolstering our ability to provide a continued critical service.

Our dedicated workforce is core to our care provision and delivery of this Green Plan. With the necessary structures in place, it will be our people and service users who will drive the changes to make us a more sustainable organisation. We will continue an open dialogue with all stakeholders to improve our Green Plans and the care we deliver.



South Tyneside and Sunderland

NHS Foundation Trust

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This Green Plan was created for South Tyneside and Sunderland NHS Foundation Trust in partnership with Inspired PLC.

